

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA	)	
	)	
	)	
Plaintiff,	)	Civil Action No. 2:10-cv-13101-BAF-RSW
	)	
v.	)	Judge Bernard A. Friedman
	)	
DTE ENERGY COMPANY, and	)	Magistrate Judge R. Steven Whalen
DETROIT EDISON COMPANY	)	
	)	
	)	
Defendants.	)	
	)	

**PLAINTIFF UNITED STATES' REPLY MEMORANDUM IN SUPPORT OF  
MOTION FOR PRELIMINARY INJUNCTION**

**EXHIBIT 13B**

## Michigan New Source Review Program Review

Performed by US EPA Region 5  
August 2004

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## **I. Executive Summary**

The United States Environmental Protection Agency (USEPA) performed on-site evaluations of the New Source Review (NSR) program. This is part of the NSR Program Evaluation Project. This two-day permit program review was intended to highlight the positive aspects of the state's air permitting program, and foster quality improvements for the state and federal air programs. This opportunity has not only improved our understanding of Michigan's NSR program, but also can be helpful to other permitting authorities throughout the Region and nation-wide.

In Michigan, the NSR review was conducted on July 21 and 22, 2003, concurrent with the Title V program review. The NSR review consisted of two parts: a discussion based on the New Source Reform Program Evaluation Questionnaire (**VII. Audit Questionnaire**), and a file review (**VIII. Audit Files Review**).

We found that the Michigan Department of Environmental Quality's (MDEQ) NSR program has many strengths, such as the Community Environmental Awareness Project, using several avenues to notify the public and encourage participation, providing many training opportunities for its staff, regulated entities and public, and developing areas of industry expertise. We did not evaluate the nonattainment NSR program because the entire state of Michigan had been designated attainment for all pollutants since 1999, and we agreed at the time of the audit that the state did not have to respond to that section of the questionnaire. Based on the review, we found three areas which are in need of improvement: approvability of NSR rules, synthetic minor tracking, and use of the frequency evaluation factor in a routine maintenance, repair and replacement (RMRR) exemption analysis. MDEQ is committed to working with USEPA to obtain approvable rules and to develop a tracking system for synthetic minor limitations.

## **II. Introduction**

In 2003, as part of its oversight role, USEPA began a four-year initiative to review the implementation of the Title V and NSR permit programs by permitting authorities throughout the country. USEPA developed two questionnaires, one addressing Title V implementation and one addressing NSR, for the Regional offices to use to provide a consistent review of all of the permitting authorities. The program review questionnaires consist of two components: questions about program implementation and criteria for a file review. The purpose of the evaluation was to review the permit programs, note practices that could be helpful to other permitting authorities, document areas needing improvement, and learn how USEPA can help the permitting authority and further improve the national programs.

On July 21, 2003 through July 22, 2003, Region 5 staff visited the MDEQ offices in Lansing, Michigan. USEPA's NSR program review team

consisted of Robert Miller, Laura David, and Genevieve Damico. In addition, Mike Sewell of Office of Air Quality Planning and Standards was in attendance. We met with MDEQ management and staff by conference call to discuss the questionnaire provided prior to our visit. During the visit, we discussed the questionnaire in more detail and performed a file review according to the criteria in the questionnaire. The results of these discussions are in Part IV of this report.

This final report summarizes findings and conclusions of the USEPA Region 5 from its review of MDEQ's NSR program. The findings and conclusions in the report are based on the answers MDEQ gave to the questionnaire, the file review, and USEPA staff's knowledge of the program from experience with reviewing MDEQ permits and programs. This information was compared to the statutory and regulatory requirements for federal permitting programs.

### **III. Description of MDEQ's Program**

The MDEQ Air Quality Division (AQD) is responsible for issuing Permits to Install (PTI) to assure that all new or modified sources of air pollution will not have a detrimental impact on human health, human welfare, or the environment, and will comply with all applicable state and federal requirements. The Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, Part 55 (Air Pollution Control) provides the statutory authority for the permitting program. The applicable regulation is R 336.1201 (Rule 201) of the Michigan Air Pollution Control Rules. This rule requires a person to obtain an approved Permit to Install for any potential source of air pollution unless the source is exempt from the permitting process. A summary of the PTI approval process is contained in Appendix B.

#### **PSD**

Prevention of Significant Deterioration - Michigan has no approved State Implementation Plan (SIP) for the permitting of major sources in an attainment area at this time. MDEQ implements the federal PSD program under a delegation of authority from USEPA, and follows the September 26, 1988 delegation letter for 40 C.F.R. § 52.21 (enclosed in Appendix C). At the time of the Audit, the entire State of Michigan met all National Ambient Air Quality Standards, and sources within the State were subject to the federal PSD program. However on June 15, 2004 several areas in Michigan became non-attainment for the 8-hour ozone standard (69 Fed. Reg. 23951 (April 30, 2004)).

#### **NSR Reform**

On December 31, 2002, USEPA substantially reformed the NSR program. The December regulations became effective in Michigan on March 3, 2003 through the existing PSD delegation. Michigan began implementing the reforms immediately. Although the audit questionnaire focused on

pre-reform PSD regulation implementation, the reformed PSD program was in effect in Michigan at the time of the Audit.

#### **IV. Findings**

##### A. Strengths

###### Public Involvement

Based on this review we find that the Air Quality Division is committed to work with the regulated community and general public to help maintain compliance with statutes that minimize adverse impacts on human health and the environment.

An example of the commitment by the Department to work with industries, citizens, and other states is the Community Environmental Awareness Project, or CEAP. The goal of the CEAP is to improve the public's access to and understanding of how major industries are performing under environmental laws and regulations. The pilot phase of this project profiles automobile manufacturing facilities because they are large manufacturers with potential for significant environmental impact. If the pilot phase is successful, the MDEQ hopes to eventually expand this effort into other industry sectors.

###### Public Participation

MDEQ utilizes many avenues to allow for public participation in addition to the newspaper notification required by the federal program. MDEQ uses (<http://www.michigan.gov/deq>), the department's "Calendar", online and hard copy publication, (enclosed copy, Appendix E), as well as direct mailing lists and e-mails to notify Canada, affected states, concerned citizens, and local government organizations of permit actions. The public may also be notified about the opportunity to be involved in the process through the letters to all who submitted comments and previously attended public hearings for a specific facility. In some cases, copies of the files are also available at local public libraries.

MDEQ maintains a helpful website. The online information includes the public notice, the fact sheet, the draft permit, and contact information for all NSR permit actions (see enclosed printed copy of the NSR Public Notice Documents, Appendix E).

MDEQ is willing to grant comment period extension requests based on need. For example, if citizens just found out about the project, or if, during the public period not all the information was available for the public, or due to natural causes (such as significantly adverse weather conditions), the public hearing could not be held. (see example for Minergy Detroit, June 12, 2003, Appendix E).

Moreover, MDEQ conducts "enhanced reviews" in which it considers environmental justice issues during a permitting process. This review includes cumulative effects and risk assessments. In the permitting process, MDEQ includes modeling and tests on the background levels and takes into consideration risk factors for elderly and children, as well as hospital statistics and information. For example, in the case of the facilities below, MDEQ looked at blood lead levels when it issued the permits.

<b>FACILITY</b>	<b>YEAR</b>
<i>Genesee Power</i>	<i>1995</i>
<i>Central Wayne</i>	<i>1997</i>
<i>Select Steel</i>	<i>1998</i>
<i>City Medical</i>	<i>1999</i>

Generally, MDEQ finds the secondary standards for NAAQS sufficient for protection of vegetation and soils. However in one case, Cadillac Renewable Energy 373-86C, the analysis included a review of USEPA 450/2-81-078 "A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals: Final Report" to establish that ambient concentrations of SO<sub>2</sub> had an insignificant impact on vegetation and soil.

Finally, MDEQ also encourages any applicant to involve the public in the permitting process. To facilitate this, MDEQ assigned engineers to set up meetings with the applicant and interested parties. One example is Ford Company and Access (an environmental citizens group), where the company informs the organization about projects and deadlines.

### Training

Throughout the years, MDEQ has developed an involved staff training process. MDEQ provides frequent training programs for new and existing employees. New staff are required to complete a specific training regimen.

In addition, MDEQ has developed and held numerous workshops and training sessions for public and industry representatives. One example is the monthly public and industry one-day PTI workshops, which focus on PTI applicability, exemptions, and permit requirements. Another example is the October 2003 one-day PSD workshops (in five locations), developed by MDEQ to help industry and citizens understand the complex federal NSR regulations and how they affect facilities in the state of Michigan. The workshop focused on the Prevention of Significant Deterioration (PSD) program and covered such topics as: PSD

applicability, including the recent reforms to the PSD program; the technical permitting reviews, including top-down Best Available Control Technology reviews and air quality modeling; and the public participation process. Both the flyer and PSD workshop's workbook are included in Appendix D.

MDEQ also issues an informational newsletter "About the Air", with all the updates in air permitting decisions, enforcement, rule changes, or website information updates (the workshop flyer for year 2003 and a copy of the newsletter are enclosed in Appendix D).

Finally, MDEQ provides training and assistance to businesses, institutions and the public to improve the environment and save money by adopting the three "R's:" reduce, reuse and recycle. Known also as pollution prevention, this is a non-regulatory assistance program that provides information, technical assistance and financial incentives to reduce pollution. This effort is done by staff of the Environmental Sciences and Service Division.

#### File Review

A summary of the file review is included in Attachment A, Files Review. The files included any information submitted from the company, the correspondence between MDEQ and company, public, or USEPA, and public participation documents. In all the reviewed files, the public participation documents included pertinent information regarding the plant and proposed action, the location of available information, a telephone number to request additional information, the date, time, and location of the public hearing (if any), the closing date of the public comment period, and the address where written comments were being received.

The files were organized in a standard structure and easily searchable. They included the emission calculations, along with supporting documentation.

MDEQ stated that any file is available for public review and has a process in place to ensure that the files consistently are well organized, enabling a permanent internal flow of information, and providing the public with necessary or required information in a timely manner.

MDEQ's responses to comments made during the public comment period are thorough and MDEQ uses USEPA guidance and rules to support its responses. The response to comments documents are attached to the final permits in the file review.

#### Areas of Expertise

Unlike MDEQ's operating permit program, MDEQ's construction permit



program is centralized. All construction permits are issued by the Central Office. The NSR permit applications for sources in the State of Michigan are reviewed by an engineer in one of three units in the Permit to Install Section. The three units are: 1) the Chemical Process Unit, 2) Thermal Process Unit, and 3) the General Manufacturing Unit. Each unit has approximately eight engineers. (See the Organizational Chart in Appendix C). Applications are carefully assigned based on expertise, experience and current workload. The Central Office coordinates its construction permit activities with the Districts to ensure that they are aware of the construction permitting. In addition, the offices perform joint site visits when necessary. This coordination proved to be essential because the Districts are responsible for inspections and for issuing operating permits.

#### Coordination

We also believe that there is good coordination not only between MDEQ and the 10 District offices, but also between MDEQ and USEPA, Region 5. In the last year, MDEQ has kept USEPA well informed of individual construction permit issues and most general permit program implementation issues. At the staff level, the permit engineer assigned to draft a PSD permit automatically submits the permit application package to USEPA before or immediately after the 30 day comment period commences. USEPA is provided a copy of the notice and associated documents for all applications requiring public participation. These up-front negotiations have fostered positive working relations between MDEQ and USEPA, and have resulted in quality work products. Since the Audit, MDEQ staff and USEPA have held monthly calls.

### B. Areas of Improvement

#### Approvability of NSR Rules

USEPA approved Michigan's original NSR SIP in 1982. Since 1982, Michigan has made several changes to its NSR rules and has submitted those changes as proposed SIP revisions. On November 9, 1999, USEPA proposed in a Federal Register notice (64 Fed. Reg. 61046) to disapprove the revisions to the Michigan NSR SIP. Some of the issues in this action include public notification requirements, construction before permit issuance, voiding of NSR permits, and relaxation of permit conditions.

The November 1999 proposed disapproval notice included a public comment period which was extended through January 24, 2000. On January 24, 2000, MDEQ submitted comments on the Proposed Rule Disapproving Revisions to Michigan's New Source Review State Implementation Plan, for consideration and inclusion in the public

record. The comments addressed items of general concern, as well as specifically addressing each item of concern.

Since the November 1999 proposed disapproval, MDEQ has continued to work with USEPA in an attempt to resolve the proposed disapproval issues. In July of 2002, MDEQ shared draft rule revisions with USEPA. USEPA provided comments on the draft rules on November 6, 2002. MDEQ completed the state rulemaking process on these rules, and the state rules became effective on July 1, 2003. MDEQ submitted these rules to USEPA for SIP approval. USEPA received the request on October 7, 2003 and is reviewing the submittal. Michigan has not submitted a proposed SIP revision to address changes made under the Clean Air Act Amendments of 1990.

#### Synthetic Minor Tracking

Michigan does not currently have a general list of synthetic minor sources that is available for review by the public and USEPA. However, the individual permits cross-reference others, and Michigan has developed an "evaluation form" with additional information. An example of the form, for the Daimler-Chrysler file, is in Appendix C. Additionally, all the districts have different lists and databases, but the existing 1990 computer program is not easy to work with. Aware of the situation, MDEQ is currently working on an updated database, which will be easily searchable, to better track synthetic minor sources. Michigan had hoped to use the new, updated program by fall 2004.

#### Frequency Evaluation Factor in a Routine Maintenance, Repair and Replacement Exemption

When determining the frequency evaluation factor, MDEQ takes into consideration all of the following: the history of the unit(s) in question, the history of the similar units at the same facility, and the history of similar units at other facilities in the same industry. While the overall emphasis is on the history of the specific unit(s), MDEQ feels that information regarding the history of other similar units at the same facility and the history of similar units at other facilities within the same industry should be taken into consideration. An example of the guidance that MDEQ follows would be the May 23, 2000, letter to Henry Nickel from Francis X. Lyons regarding the Monroe Power plant (the letter is enclosed in Appendix C). However, considering the history of similar units at other facilities within the same industry is not consistent with USEPA policy (recently expressed in utility enforcement actions).

#### C. Other Noted Aspects of the Program

### Permit Issuance Efficiency

Because of general concern from industry that the permitting process is always lengthy, MDEQ is carefully monitoring and trying to minimize the average time taken to issue a PSD permit, starting from the time the application was determined complete (see enclosed Table K1 and K2, Appendix B). MDEQ has had a great deal of difficulty obtaining from sources information necessary to consider an application complete. For example, for auto assembly plants, it takes MDEQ an average of 32 days of engineer time to review a permit application, but has taken an average of 384 days from the date it originally receives an incomplete application for MDEQ to issue a permit. For non-auto sources, review of an application takes about 109 days of engineer time, but final permit issuance takes approximately 363 days.

### Nonattainment NSR Program

We did not evaluate the nonattainment NSR program. Prior to the 2003 audit, MDEQ and USEPA agreed that the state did not have to respond to these questions. The audit captured a moment in time - July 21 and 22, 2003. At that time, the entire state of Michigan had been designated attainment for all pollutants since 1999 and there were no non-attainment NSR applications in over five years. Further, there was a large lag time before the designation of non-attainment areas and the release of the ozone and PM2.5 implementation rules outlining the approach Michigan must take. MDEQ and USEPA recognized that, prior to the re-designations taking effect, significant training of staff on the Clean Air Act requirements, Appendix S requirements, new ozone and PM2.5 implementation rules, state rules and any USEPA guidance regarding non-attainment permitting would be needed. This training occurred after the July 21 and 22, 2003 audit.

## **V. Recommendations**

### Approvability of NSR rules

MDEQ revised their rules and submitted them to USEPA as stated in section IV.B of this report. The MDEQ also recognizes that most of the approval issues and arguments are very technical and will likely require additional discussion. MDEQ expressed the intention to work with USEPA to find solutions and obtain approval of its NSR SIP. We appreciate Michigan's commitment to have a SIP-approved NSR program. We recommend that USEPA and MDEQ continue discussions towards this end.

### Synthetic Minor Tracking

We are encouraged by MDEQ's efforts to track synthetic minor limitations. The importance of this effort is magnified by the NSR reform changes USEPA has made in the federal program. We recommend that MDEQ remain focused on the development of its tracking system. Frequency Evaluation Factor in a Routine Maintenance, Repair and Replacement Exemption

In making RMRR determinations, Michigan should discontinue consideration of the frequency with which other sources in an industry perform similar maintenance, repair or replacement projects.

## **VI. MDEQ Concerns with the Required Program**

### **Public Notice Requirements**

Although over 40% of the PSD permits where comments are received are revised due to the comments, no comments from the public have been received for synthetic minors. MDEQ continues to express concern regarding the public noticing of synthetic minor permit applications less than the 90% major threshold level. Michigan's original SIP, approved by USEPA in 1973, provides for a 21-day public comment period for a number of sources, including PSD applications and those that the agency judges to potentially have significant air quality impact, or that are the object of substantial public concern. As the program matured, additional public comment requirements were added, including public comment for all major sources and modifications as defined by the CAA, as well as any permit application for which there is a known public controversy. These new requirements make the public participation requirements more stringent than the plan already found to meet the requirements of 40 C.F.R. § 51.161.

USEPA's position is the added public review provided for by Rule 205(3) does not adequately address its concerns regarding public comment for synthetic minor sources or that the 90 percent emission threshold has not been adequately demonstrated. The 90 percent threshold was selected after review of a number of years of permitting and public commenting on synthetic minor sources. Michigan found that it did not receive comments on synthetic minor sources whose emission limit caps were less than 90 percent of the major source threshold when they were public noticed. In 1996, 52 synthetic minor permits were issued with 31 having public notice. No comments were received for any permit with synthetic minor limits below the 90 percent threshold. To require such an administrative burden as well as a direct cost to the agency of newspaper notices, hearing locations and other expenses of \$1,300 - \$1,500 for each permit that goes out for public comment, as well as the time and cost to the applicant due to the delays, must be considered. The MDEQ has instead focused on those applications and sources where there is public concern and provided enhanced public

participation such as Informational Meetings, direct mailings, etc.

#### Training

The December 31, 2002 NSR Reform regulations became effective in attainment areas in the state of Michigan on March 3, 2003. Like many of the states, MDEQ staff felt that additional NSR Reform training would be helpful.

#### Inconsistency of Program Application Nationwide

Finally, one general concern that MDEQ has is related to the inconsistency of program application, not only within Region V, but also nationwide. By comparing the reviews done by other states, MDEQ feels that other states are not held to the same standard they are. Many are not required to use the top-down BACT process. Although recognizing there can be slight differences in determinations, MDEQ found that the level of technology required and/or the level of documentation necessary to demonstrate that a technology is infeasible or too costly is far higher in Region V versus the other areas of the country. As a result, MDEQ feels that they are being held to a much higher standard to the detriment of the state's economy. Currently MDEQ is re-evaluating the rules/requirements and our interpretation and implementation of them to determine what they believe are the appropriate levels of review and documentation.

#### VII. Audit Questionnaire

**Note: This questionnaire does not address implementation of changes made to the major NSR rules in EPA's rulemaking on December 31, 2002.**

**Unless otherwise stated, this review will cover permits issued in the last five years.**

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##### **I) Program Requirements Common to Both Prevention of Significant Deterioration (PSD) and Nonattainment NSR**

###### **1. Netting**

- NO 1. Is netting approved in your NSR SIP for determining whether modifications at major stationary sources are subject to major NSR (PSD or nonattainment NSR as applicable)? If no, please explain.

Answer: MDEQ does not have an approved NSR SIP and is delegated to implement the federal program for 40 CFR 52.21 (September 26, 1988 delegation letter is enclosed in Appendix C). The question is N/A for NAA, because for the last 5 years all areas in Michigan have been attainment areas.

YES 2. Is your contemporaneous look-back period five years, exactly the same as in the Federal PSD regulations at 40 CFR 52.21. If not, what is the contemporaneous time period for netting in your SIP?

Note: MI is delegated to implement federal rule 52.21, therefore the contemporaneous look-back period is five years. A permit example is enclosed in Appendix D (Draft Permit B3692 for Packaging Corporation of America).

YES 3. For determining the baseline from which emission reductions are calculated do you require the applicant to submit the actual emissions from the units along with any permit limits that apply?

Note: An example of this practice is enclosed in Appendix D (Holcim Draft Permit 60-710).

NO 4. Do you allow an applicant to receive emission reduction netting credit for reducing allowable emissions instead of actual emissions? If yes, please explain.

Note: MDEQ does not allow an applicant to receive emission reduction netting credit for reducing allowable emissions. Only the actual emissions are considered in the calculation. An example is enclosed in Appendix D (Holcim Draft Permit 60-710).

NO 5. Do you allow an applicant to receive emission reduction credit for reducing any portion of actual emissions that resulted because the source was operating out of compliance?

Note: MDEQ follows the draft NSR Workshop manual, and documents page A.41. The pertinent paragraph states that "a source cannot receive emission reduction credit for reducing any portion of actual emissions which resulted because the source was out of compliance".

NO 6. Do you allow an applicant to receive emission reduction credit for an emissions unit that has not been constructed or operated?

YES 7. Are emissions reductions to meet MACT requirements

eligible for netting credits? If yes, under what conditions? (See EPA's November 12, 1997 memo from John Seitz entitled "Crediting of Maximum Achievable Control Technology (MACT) Emission Reductions for New Source Review (NSR) Netting an Offsets".)

Answer: MDEQ states that they follow the memo as written (memo is enclosed in Appendix C).

YES 8. When any emissions decreases are claimed as part of a proposed modification, do you require that all stationary, source-wide, creditable and contemporaneous emissions increases and decreases of the pollutant be included in the major NSR applicability determination?

9. To avoid "double counting" of emissions reductions what process do you use to determine if emissions reductions considered for netting have already been relied on in issuing a major NSR permit for the source?

Answer: With regards to avoiding "double counting" of emission reductions, at the time the netting is reviewed, MDEQ ensures that the actual decreases occurred at the same stationary source and are federally enforceable - they make sure the equipment has been removed and the permit is voided, or the permit is revised to accommodate the change in emissions or process needed for the netting. This is documented in the engineer's evaluation, the permit conditions for the approved project, and the public participation documents. All permits involving a netting exercise are public noticed. During the review process, prior to the use of any credits MDEQ verifies the status of the equipment through our permitting system and the emission inventory. Active and voided files are reviewed and the calculations are verified to ensure that the emission reductions are credible and clearly have not been previously relied upon.

NO 10. Do you have a process to track projects that use credits to net out of major NSR? If yes, please explain.

Note: All credits are documented in the permits. MDEQ can track the credits for each individual source by keeping data about a source in one place and assigning one person to a company, but there is no state-wide database yet; nevertheless, MDEQ is working on a program to track projects that used netting out of PSD.

YES 11. Do you require that emissions reductions (e.g., reductions from unit shutdowns) must be enforceable to be creditable for netting?



Note: An example of this practice is enclosed in Appendix D (Permit No. 153-73D for Woodbridge Corporation).

NO 12. Have you had public concerns regarding the netting analysis and procedures used for any issued permits that avoided major NSR? If yes, please describe.

NO 13. Do you allow interpollutant trading when netting, e.g., can a source use NOx or PM credits for netting out of VOC increases? If yes, please explain.

Note: MDEQ does not have any requests since for the last 20+ years. MDEQ follows the EPA guidance (Page A.39 of the draft New Source Review Workshop Manual, which states "[r]eductions must be of the same pollutant as the emissions increase from the proposed modification and must be qualitatively equivalent in their effects on public health and welfare to the effects attributable to the proposed increase.")

14. What process do you have to verify that a source's emissions reductions considered for netting, including emissions reductions that may have been "banked," are not already used by the source, or another source, as nonattainment NSR offsets ? Please describe.

Answer: MDEQ verifies that a source's emissions reductions considered for netting are not used as offsets by tracking those emissions for each source: MDEQ requires all sources to document the emissions reductions, and the emissions information about a source is in the source's permit files.

## **2. Routine Maintenance, Repair, and Replacement (RMRR)**

YES 1. Do you have knowledge of the EPA letter dated May 23, 2000, to Henry Nickel of Hunton & Williams concerning Detroit Edison and the Wisconsin Electric Power Company (WEPCO) case RMRR documents?

A copy of the letter is enclosed in Appendix C.

2. What other documents do you rely upon when making RMRR exemption determinations?

Answer: As a delegated state to implement the PSD program, MDEQ uses applicable state rules 285 (a), (b), and (c) (enclosed in Appendix B). These rules define the permit exemptions.

NO 3. Do you have a formal protocol for making RMRR exemption determinations? If yes, describe the protocol.



Answer: MDEQ is using the DTE Conners Creek Determination. If the rule doesn't clearly apply to a permit, MDEQ asks the company to apply for a permit.

4. Approximately how many formal RMRR exemption determinations have you made in the last five years? Using any one such determination as an example, describe the example, state the conclusion you reached, and discuss how you reached the conclusion.

Answer: MDEQ made 2 formal RMRR exemptions. An example would be the Conners Creek Power Plant. This involved the conversion of four existing boilers originally designed and used to burn coal to burn natural gas. Detroit Edison contended that the plant had been on extended cold standby. AQD, USEPA and WCAQMD investigated the scope and extent of the maintenance and repairs that were being made at the Plant. The findings were compared to existing USEPA related policy guidance and memoranda. On July 16, 1998, the agencies determined that the actions triggered NSR permitting requirements, NSPS, and PSD. Detroit Edison filed a complaint in Federal District Court. The Judge found that Detroit Edison had violated the CAA when it renovated, restarted, and operated the plant without first obtaining the necessary permit. The company submitted the application, and, ultimately received a PSD permit. In addition, many additional informal reviews are made both by permit and field staff as they routinely respond to questions raised in meetings, telephone calls, and inspections. There is no requirement for the agency to provide formal reviews. Ultimately, MDEQ feels that it is the applicant's responsibility to ensure they are complying with all aspects of the rules. Otherwise the facility may be subject to enforcement action.

- YES 5. Do you keep documentation of formal RMRR exemption determinations?

Note: MDEQ keeps track of the formal RMRR determinations (there are 2).

- YES 6. Do you restrict the RMRR exemption to units being modified and exclude replacement of entire units from RMRR exemption consideration?

Note: There is no "entire" units replacement under RMRR exemption.

- YES 7. Regarding the "purpose" evaluation factor in an RMRR exemption evaluation, do you exclude projects from the RMRR exemption that result in an increase in production capacity?

8. Regarding the "frequency" evaluation factor in an RMRR exemption evaluation, do you consider just the history of the specific unit(s) in question, just the history of other similar units at the same facility, just the history of similar units at other facilities in the same industry, or some combination of these histories?

Answer: MDEQ considers this a case-specific determination. They rely upon EPA's guidance to determine what frequency evaluation factor to consider. An example of the guidance that MDEQ follows would be the May 23, 2000, letter to Henry Nickel from Francis X. Lyons regarding the Monroe Power plant (the letter is enclosed in Appendix C). While MDEQ's overall emphasis is on the history of the specific unit(s), information regarding the history of other similar units at the same facility and the history of similar units at other facilities within the same industry may sometimes be taken into consideration. For example, on pages 2 and 3 of the May 23, 2000 document, the focus is on the discussion of the historical blade replacements performed at Detroit Edison, but also states "[T]he project goes well beyond routine turbine maintenance, repair and replacement activities for the utility industry in general".

9. Regarding the "cost" evaluation factor in an RMRR exemption evaluation, what procedure do you follow to take cost into account?

Answer: MDEQ doesn't have a formal procedure, because there is no EPA guidance or formal rules in this regard; MDEQ is using the comparison between the routine vs. replacement costs.

- YES 10. Do you provide RMRR exemption evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

Answer: MDEQ staff is exposed to OECA, EAB, states, and court determinations and trained on RMRR exemptions. This training includes formal Field and/or Permit Section meetings where group discussions are held on specific topics such as routine maintenance, individual discussions and review of guidance documents when issues are raised, emails and articles written regarding a specific issue review of recent determinations, as well as on-the-job training sessions.

- YES 11. Do you provide an information outreach program on RMRR exemption evaluations for owners of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

Answer: The outreach activity includes: monthly 1-day PTI workshops to community (examples of the flyers are in Appendix E); there is a newsletter (electronically or hard copy)("About the Air"), with the recent permitting and enforcement decisions (examples of the emails/hard copy are in Appendix E); there is also a small business assistance program that train owners about the permitting process, exemptions. MDEQ's Environmental Assistance Division also edits a fact sheet "Air Pollution Control 101" with info about MDEQ/AQD, air pollutants, state and federal rules and regulations (the fact sheet is enclosed in Appendix E).

### **3. Synthetic Minor Limits**

NO 1. Do you keep a list of synthetic minor sources (i.e., sources that would otherwise be major for NSR but are considered minor because of emissions limits or other limiting conditions in their permits) that is available for review by the public and EPA? If yes, please explain this tracking system and how it is updated.

Note: Due to the high volume, MDEQ does not keep a general list of synthetic minor sources. However, the districts have their own lists/database. For every permit an "evaluation form" (including the emission information) is developed and the individual permits cross-reference previous permits. An example of the evaluation form is enclosed in Appendix D, for the Daimler-Chrysler file, also reviewed during the audit (Audit Part 2, File Review). In this case the company has elected to take permit conditions to make it a synthetic minor source under PSD and to opt-out of Title V. Currently MDEQ is working on developing a centralized database to better track synthetic minor sources.

YES 2. Do you include "prompt deviation" reporting requirements in synthetic minor source permits? If yes, how do you define "prompt deviation"?

Answer: Pursuant to Rule 912 (Appendix B), MDEQ considers "prompt deviation" reporting requirements a part of the general conditions of every permit. This rule deals with notifications and reporting requirements of violations of emission limits; "prompt deviation" means "as soon as reasonably possible, but not later than 2 business days". An example is enclosed in Appendix D (Permit No. 283-01 for The Kellogg Company).

YES 3. Do permit applications your agency reviews, and permits issued identify the requirements (e.g., PSD, nonattainment NSR, Title V, NESHAP) being avoided by keeping the source

minor?

Answer: Pursuant Rule 205 (Appendix B), MDEQ identifies and includes the requirements that are avoided by keeping a source minor in the staff report, evaluation form, and file. An example is enclosed in Appendix D (Draft Permit No. 355-97A for Valley Asphalt Company, Inc).

4. Describe your formal process for establishing or designating a synthetic minor source.

Answer: Any source must send a permit application/request for a synthetic minor permit. The application includes all the emissions information. MDEQ checks the emission inventory and draft emission limits according to the federal and state guidance. Establishing or designating a synthetic minor source is described in Rule 205 (Appendix B), and the enclosed intra office April 1998 Seitz Memo for staff (drafting limits included, Appendix C); MDEQ has a formal procedure for writing synthetic minor permits (enclosed internal guidance, effective 10/04/2001, Appendix C). This procedure consists of 7 steps:

- 1) Identify the regulation from which the source wishes to avoid applicability.
- 2) Write the permit conditions to have applicability that is identical to the regulation that is being avoided.
- 3) Include a method of determining compliance for the synthetic minor limit.
- 4) Ensure that the limit is practically enforceable.
- 5) Provide for public comment
- 6) Note the underlying applicable requirements in the permit
- 7) Note the reason for the synthetic minor limit in the permit's Evaluation Form.

- YES 5. For synthetic minor sources do your permits include enforceable limits to keep the sources minor?

Note: State Rules (205, 911, and 912, enclosed in Appendix B) require that synthetic minor permits include all the operational emission limits. An example is the enclosed Final Permit No. 143-02 for Delphi Saginaw Steering Systems, and General Permit (Appendix D).

6. How is compliance with the synthetic minor limits tracked over time? Please explain.

Answer: Each synthetic minor permit requires recordkeeping and reporting for various key parameters, in order to assure on-going compliance. In order to document this compliance, MDEQ requires deviations reports to be submitted. The district field inspectors check the compliance with the conditions of the permits according

their inspection schedules.

YES 7. Are you satisfied that your tracking activities are sufficient to ensure that sources getting synthetic minor permits to avoid major NSR review are not actually operating above the applicable major source threshold?

Note: MDEQ is currently working on developing a centralized database to better track synthetic minor permits.

YES 8. Do you include in your synthetic minor permits conditions requiring sources to notify you if and when the major source threshold is reached?

Note: Conform state Rule 912 (Appendix B), a source must report any deviation, and, in this case, reaching the threshold is considered a deviation from permit conditions.

YES 9. Do you perform (or require) modeling for sources seeking synthetic minor permits to determine impacts on PSD increments?

YES 10. Do you consider visibility issues in Class I areas, if applicable, when reviewing synthetic minor applications?

Note: The only Class I area in MI is in the Upper Peninsula.

#### **4. Pollution Control Projects (PCP) Exclusion**

YES 1. Do you have standard permitting procedures or rules that allow for certain changes at non-utility emissions units to be designated as PCP, which are excluded from major NSR?

Answer: MDEQ requires the applicant to send a permit application and to apply for PCP permit as for any permit (including public participation requirements, modeling analysis, etc.). Now MDEQ follows the December 31, 2002 NSR Reform requirements. Before March 2003, MDEQ had followed 1994 Seitz Memo (enclosed, Appendix C).

2. How many PCP exclusions have been granted for "feed" or "fuel" switches?

Answer: Since 1994 (Seitz Memo, enclosed, Appendix C) MDEQ granted many PCPs. There are no numerical records on the type of PCPs on file, because the permits are not organized by type, but by the source name.

3. What process do you use to determine if the project is "environmentally beneficial" and not just "economically

efficient"?

Answer: Based on the info received through the permit application, MDEQ only determines the environmental benefits (the emissions impact). The "economical efficiency" is not a weighted factor.

4. How are the collateral emission increases evaluated? Do you require a modeling analysis to demonstrate insignificant impacts from emissions increases?

Answer: All PCP's are required to meet the "cause or contribute" test to demonstrate that the project does not adversely impact an Air Quality Related Value (AQRV). A modeling analysis is required, and the collateral emission increases are evaluated, through modeling, on a case-by-case basis.

5. How do you handle collateral increases in hazardous air pollutants (HAP)?

Answer: MDEQ follows the Air Toxic Rules 224 and 225 (Appendix B), which describe the T-BACT and health-based screening level requirements for new and modified source of air toxics. However, it can also be a case by case situation (for example, if 112(g) applies, then PCP exclusion would not be possible).

- NO 6. Are the emission reduction credits from PCP available for netting or NSR offsets? Please explain.

Answer: This issue has not come up. Currently, there is no rule or guideline that would allow a source to use emission reduction credits from PCP for netting or NSR offsets.

7. Which add-on control devices are most frequently involved in PCP exclusion requests?

Answer: Low Nox Burners are the most frequently used.

8. Which types of industrial sources typically request PCP exclusions from major NSR?

Answer: Usually facilities with large boilers (such as utilities or wood products industry) request PCP exclusion from major NSR.

- NO 9. Does your NSR SIP include the PCP exclusion for electric utility steam generating units (often referred to as the WEPCO exclusion)?

Note: The PCP exclusion is implemented through the PSD program

delegation (MDEQ does not have a SIP approved).

## **5. Fugitive Emissions**

1. Please provide your regulatory definition of "fugitive" emissions for major NSR applicability purposes and how does it differ from the federal definition.

Answer: The definition that MDEQ is using, Rule 106 (1), does not differ from the Part 51 federal definition. Rule 106 (1) defines "fugitive emissions" as those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

- YES 2. Do you make a distinction between "fugitive" emissions and "uncontrolled" emissions? If so, please explain.

Answer: The uncontrolled emissions are defined in Rule 121 (a) (enclosed in Appendix B). They are defined as those emissions expected to occur without control equipment, unless such control equipment is, aside from air pollution control requirements, vital to production of the normal product of the process or to its normal operation.

- YES/ NO 3. Do you include fugitive emissions in major NSR applicability determinations for new sources? For modified sources? Please explain.

Answer: MDEQ includes fugitive emissions in major NSR applicability determinations for the 28 categories sources and HAPs, but not for the modified sources, because there the NSR Reform applies (baseline is projected actuals).

- YES 4. Do you allow major sources to use reductions in fugitive emissions for netting purposes? If so, please explain, and describe how you determine the fugitive emissions "baseline" used for netting.

Answer: MDEQ would only allow major sources to use reduction in fugitive emissions for netting purposes if the reductions are quantifiable, are enforceable as a practical matter, and were considered as part of the baseline. The 28 PSD sources consider fugitive emissions. The baseline is determined on a case by case basis. Factors that must be considered is the methodology used to determine the fugitive emissions such as emission factors (pounds per 1000 pounds processed) or testing, and the corresponding operational parameter (pounds processed) for the baseline time period. It is



important to note that the answer provided did not include the NSR reforms which provided additional guidance. As a delegated state, Michigan is obligated to implement the 12/31/2003 reforms.

5. Please provide a description of your guidelines or calculation methodology used to quantify fugitive emissions.

Answer: MDEQ looks at the emission factors (AP-42), any road activities, and generally at any source specific guidance for emissions inventory. This is especially helpful for sources with many emission factors.

- YES 6. Do your permits contain conditions for specific emission limits or control methods/work practice standards for fugitive emissions consistent with requirements for BACT?

Note: The conditions include mass balance, fugitive dust plans (especially in the chemical industry), and work practices.

## **6. Modeling**

- YES 1. Do you follow EPA's modeling guidelines in 40 CFR Part 51 Appendix W?

Answer: MDEQ air modeling staff feels that it is very important to do so.

- NO 2. Are deviations from the modeling guidelines in Appendix W subjected to public comment and submitted to the regional EPA office for approval?

Note: There are not many deviations; also, any single facility can't use more than 80% of available increments for criteria pollutants.

- YES 3. Are minor permit actions (i.e., proposed new and modified minor sources), evaluated to determine if modeling for PSD increments is needed? Under what circumstances is increment modeling triggered for these minor permit actions?

Answer: If the new emissions are below the significant level, then no modeling is required (except if the source is in a sensitive area, such as Class I area).

- YES 4. Do you ask applicants to submit a modeling protocol for approval prior to submitting modeling?



Note: The modeling protocol is recommended for all major NSRs (PSDs) and the controversial ones.

YES 5. Is the protocol provided to other interested organizations (e.g., EPA, Federal Land Manager)?

Note: It is not a standard procedure; the modeling protocol is provided only if requested.

YES 6. Is the effect of downwash modeled if stacks are less than good engineering practice (GEP)?

Note: MDEQ is using a standard program (called "BPIP") to determine the downwash. BPIP (Building Profile Input Program) is an EPA designated utility to assist unique modeling problems associated with building wake effects.

YES 7. Are modeling analyses available for public review?

YES 8. Do you review modeling submittals to determine if option switches are correct?

Note: MDEQ air modeling staff always remodel the data received.

9. When off-site meteorological data are used what years are typically used?

Answer: MDEQ uses data from the National Weather Services because there are no independent meteorological stations. Usually for on-site data last year is considered, and for off-site data the most recent 5 years that MDEQ can validate (as of today they are 1987-1991).

10. How do you train your modeling staff?

Answer: Although there is a formal training for senior staff, usually the training is informal (peer training, on-site training, calls participation, and assignments to gradually complex applications)

YES 11. Do you follow The Air Quality Analysis, Additional Impacts Analysis, and Class I Area Impact Analysis guidance provided in the New Source Review Workshop Manual (Draft October 1990)?

12. For cumulative national ambient air quality standards (NAAQS) and PSD increment compliance assessment:

a. How are the appropriate emission inventories of other sources developed?

Answer: MDEQ has 2 databases used to determine offsite emissions inventory: the permit files, including the PTE emissions data, and the MARS database, with the actual emissions (the grand-fathered sources are using the actuals). Both databases' data are compared in order to determine the emissions inventory.

- b. What are the reasons used to identify and/or eliminate emission sources?

Answer: If the emission source is in the emission inventory file, it will be included, unless it's voided or removed for any reason except Title 5. If a source is voided, it has to go through the permitting process. Also, a source that shuts down for a number of years cannot use the credits for offsets.

- c. How are PSD increment consuming/expanding sources identified and tracked?

Answer: MDEQ is using the permits' dates. The increments are identified by the consecutive numbers of years that permits are issued after baseline date, and tracked in permit files (each permit has a number). One area of difficulty is tracking the increments from grandfathered facilities.

- NO d. Are mobile sources modeled for increment compliance?

Note: The mobile sources are not modeled because there is no actual emission changes in mobile sources compared with baseline emissions. Nevertheless, the mobile sources are considered for the incremental compliance.

13. What is the basis (e.g., allowable, maximum or average actual short-term emissions, last two year period, etc.) of the emission rates provided in the NAAQS and PSD increment consuming inventories of other sources?

Answer: It is done by date, pre and post baseline approach.

14. How do you ensure that the controlling concentrations reported by the applicant for each pollutant and averaging period were appropriately determined?

Answer: First of all, MDEQ makes sure that the correct data is used in the permit applications. The reported emission rates and modeled emission rates are compared to the model run and the permit. Secondly, there is a constant dialog between permit engineers, modelers, and

applicants. Permit engineers (and permit writers) are using their technical expertise and data on hand to provide the numbers to the air modelers.

YES 15. Are the impact modeling analyses reviewed to ensure that they are accurate and complete, and that appropriate modeling procedures (e.g., modeled to 100-m resolution, fence line and not property line, nearest modeled receptors, etc.) were followed?

Note: Usually MDEQ staff remodels the air modeling received (sometimes more than once). In order to find the maximum impact ("hot spot", as the modelers call it), MDEQ uses a maximum of 25 m air boundary (fence line), a maximum of 50 m resolution, and data collected every 100 m after several kilometers.

YES/ NO 16. Is complex terrain an issue in your region? What modeling procedures are used to address impacts in complex terrain?

Answer: The geographical complexity of the area triggers the complexity of the modeling procedures. For example, if the flat areas and rolling area terrain deviations in the receptor area are more than 25% of the shortest stack, the terrain is included in the modeling. A modeling procedure used to determine the terrain heights is AERMAP, with the possibility to use in the future another modeling procedure, AERMOD. The AERMOD is actually a modeling system with three separate components: AERMOD (AERMIC Dispersion Model), AERMAP (AERMOD Terrain Preprocessor), and AERMET (AERMOD Meteorological Preprocessor). Special features of AERMOD include its ability to treat the vertical inhomogeneity of the planetary boundary layer special treatment of surface releases, irregularly-shaped area sources, a three plume model for the convective boundary layer, limitation of vertical mixing in the stable boundary layer, and fixing the reflecting surface at the stack base. A treatment of dispersion in the presence of intermediate and complex terrain is used that improves on that currently in use in ISCST and other models, yet without the complexity of the Complex Terrain Dispersion Model-Plus (CTDMPLUS). To the extent practicable, the structure of the input or the control file for AERMOD is the same as that for the ISCST3. At this time, the AERMOD contains the same algorithms for building downwash as those found in the ISCST3 model.

The AERMET is the meteorological preprocessor for the AERMOD. Input data can come from hourly cloud cover observations, surface meteorological observations and twice-a-day upper air soundings. Output includes surface meteorological observations and parameters and vertical profiles of several atmospheric parameters.

The AERMAP is a terrain preprocessor designed to simplify and standardize the input of terrain data for the AERMOD. Input data include receptor terrain elevation data. The terrain data may be in the form of digital terrain data that is available from the U.S. Geological Survey. Output includes, for each receptor, location and height scale, which are elevations used for the computation of air flow around hills.

YES 17. Are pollutants without NAAQS and/or PSD increments addressed in the air quality impact assessments? What threshold concentrations (e.g., acceptable ambient concentrations) are used to evaluate impacts?

Answer: MDEQ includes in any air quality impact assessment the long and short term effects on the maximum impact boundary, as well as the carcinogenic and non-carcinogenic limits (Initial Threshold Screening Level, or ITSL and Initial Risk Screening Level, or IRS�). The list of these screening levels is developed by the Air Quality Division and updated via the webpage on a weekly basis. The threshold concentrations depend on the pollutant. All these information are available for public in the MDEQ's webpage.

YES 18. Do you have written agency-specific air quality modeling guidance for use by applicants? If yes, has the guidance been provided to other concerned organizations (e.g., regional EPA, appropriate FLM, etc.) for review and comment? Is your guidance available on the internet?

Answer: MDEQ is using the Michigan Air Use Permit Technical Manual and Air Quality Dispersion Modeling. These are available for public in the MDEQ's webpage. A copy of the manual is enclosed in Appendix C.

19. How do you determine the appropriateness of proposed meteorological data for an application? When are "on-site" meteorological data required for an application? Are "on-site" meteorological data validated and accepted if recovery is less than 90 percent?

Answer: In order to determine the appropriateness of proposed meteorological data for an application, MDEQ follows the EPA guidelines and pre-processes the data. The "on-site" meteorological data is requested when is part of the PSD permitting requirements.

20. When an applicant's air quality modeling reveals NAAQS and/or PSD increment violations, what is required to grant the permit and how are the violations resolved?

Answer: Per Rule 207 (Appendix B), MDEQ grants a permit to an applicant with permit violations only if the applicant emissions don't have a significant contribution to the significant PSD level.

YES 21. Do your regulations include the federal definition of ambient air? If no, what is your definition of ambient air?

Note: The interpretation from the policy memorandum definition is the same as in 40 CFR Part 51 Appendix W.

22. Discuss your procedures for modeling "hot spots," including minimum receptor spacing?

Answer: MDEQ uses a maximum of 25 m along fenceline in order to maximize the "hot spots". The maximum impact is then determined through calculations and measurements.

23. How do you determine if background air quality data are representative?

Answer: MDEQ uses sites close to the source and looks at the sources in the monitor area, then compare that to the area where the applicant is located. For accuracy, MDEQ uses own monitor data and EPA's Air database.

YES 24. Do you use the same NAD for stack, receptor, and building UTM coordinates?

Note: MDEQ also finds useful to use USGS map, TerraFly and MapQuest.

## **7. Stationary Source Determinations**

YES/NO1. Do your SIP-approved rules define stationary source differently than 40 CFR 51.165 or 51.166? If yes, please explain.

Answer: Michigan is a delegated, not a SIP approved state (since September 26, 1988). Currently, the Rule 119 (r) is using a combination of Part 51 and Part 71 definitions for stationary sources: all buildings, structures, facilities, or installations which emit or have the potential to emit 1 or more air contaminants, which are located at 1 or more contiguous or adjacent properties, which are under the control of the same person, and which have the same 2-digit major group code associated with their primary activity. In addition, a stationary source includes any other buildings, structures, facilities, or installations which emit or have the potential to emit 1 or more air contaminants, which are located at 1 or more contiguous or adjacent properties, which are under the control of the same person,

and which have a different 2-digit major group code, but which support the primary activity.

Part 51 defines stationary source as any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act.

Part 71 defines stationary source as any building, structure, facility, or installation which emits or may emit any air pollutant or any pollutant listed under section 112(b) of the Act.

YES 2. When determining if emissions units are contiguous or adjacent, do you assess whether emissions units under common ownership or control may be a single stationary source regardless of the distance between the emissions units? Please explain.

Answer: MDEQ follows the June 21, 1996 Operational Memorandum regarding Stationary Source Determinations (enclosed in Appendix C). This memorandum elaborates on the definition of the term "stationary source" and provides background information and guidance on the steps involved in making a determination of which components of a facility are required to be included in specific stationary source determinations. The procedural steps in making the determination are:

- 1). Evaluate the spatial relationships if multiple properties are involved, i.e., are they "adjacent or contiguous"
- 2). Evaluate the "control" relationship, i.e., if the entities are "under the control of the same person"
- 3). Determine the industrial grouping relationship.

If any of the listed criteria do not apply, the entities are treated as separate stationary sources.

YES 3. Do you assess facilities' financial, personnel, and contractual relationships to determine common ownership or control?

YES 4. Do you assess whether sources with different first two-digit SIC codes (i.e., emissions units not in the same industrial grouping) may qualify as separate stationary sources?

## **8. Debottlenecking and Increased Utilization**

- YES 1. When determining if proposed modifications are subject to major NSR, do you include emissions increases from existing emissions units that are not physically modified (i.e., units that will be debottlenecked or have increased utilization such as boilers)?

Note: An example of this procedure is in the Fact Sheet for Hillman Power Company's permit No. 687-86G (enclosed in Appendix D).

2. What method is used to determine the emissions increase from these emissions units? What EPA guidance do you consider for this issue?

Answer: MDEQ follows several guidance Memos (the latest is the September 18, 1989 EPA guidance Memo "Request for Clarification of Policy Regarding the Net Emissions Increase", enclosed in Appendix C). As a standard operational procedure, MDEQ considers the entire process, and all the ramifications of a bottleneck situation.

- YES 3. Do you train your permitting staff to include such emissions increases when determining if a modification is major for NSR?

Note: The training is mostly on the job training, including series of training sessions and section meetings every 6 weeks.

#### **9. Relaxation of Limits Taken To Avoid Major NSR**

1. What types of changes do you consider potentially subject to relaxation assessments?

Answer: Pursuant to Rule 205 (enclosed in Appendix B), any change in limits established to make the source a synthetic minor would require reassessment.

- YES 2. Do you have a written policy on relaxation assessments?

Answer: Michigan follows the rules: 201(1), which states that a change in a permit condition is a modification which requires a permit to change an existing limit, and 205(1)(a), which states that any synthetic minor permit from NSR must meet two criteria: practical enforceable emission limitation and a process restriction (i.e. a production or an operational restriction). A relaxation in a permit limitation is further addressed as the requirement to apply rules R336.1201 and R336.1220, which list the Permits to Install requirements in attainment and nonattainment areas. These rules are applied to the source or modification as though construction had not yet commenced. In addition, Michigan follows federal guidance on sham



and staged construction permitting as well.

3. Approximately how many relaxation assessments have you made in the last five years?

Answer: It is difficult to answer to this question, because MDEQ has no centralized tracking system in place for all the relaxation assessments, but is currently working in developing one.

- YES 4. Do you include specific permit limits and conditions to make potential future relaxation possibilities more identifiable?

Note: The limits are clearly defined in each permit and the permit writer can easily verify past modifications on a permit and identify potential relaxations.

5. What is your understanding of the appropriate circumstances under which an existing minor source is allowed a 100/250-tons-per-year emissions increase without triggering relaxation provisions?

Answer: If the existing source is a synthetic minor source the issue or possibility of sham and/or staged construction must always be considered. Other than above, if the existing emission units are not modified or debottlenecked then there is no issue. If they are modified or debottlenecked and are not an issue for sham or staged construction, then they are subject to NSR review with the new major source modification.

- YES 6. Do you provide relaxation evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

Answer: Besides the on-the-job training, there are meetings for training purposes, and various cross-training sessions. In addition, all permit writers must attend a formal NSR training.

#### **10. Circumvention/Aggregation Issues**

- YES 1. When you review a modification to determine if it is major for NSR, do you consider aggregating prior minor emissions increases at the stationary source?
2. Please provide any criteria you may use to determine if a series of minor modifications or projects needs to be aggregated for NSR applicability purposes?



Answer: MDEQ is reviewing these situations on a case by case basis, analyzing available information (technical, legal, and financial) that may determine the correlation between small changes. To avoid lack of communication and waste of knowledge, MDEQ assigns, on a project-by-project basis, the same engineer(s) to a company.

- YES    3.    When requests are made to permit new or modified emissions units as separate minor changes over time, do you evaluate whether the permitting process is purposely staged as minor when the changes are really one permitting action subject to major NSR?
4.    How do you track multiple modifications at a source over a short period of time?

Answer: Usually the company must send 2 copies of the permit application, one to the Lansing Office and one to the district (for the inspectors, who might or might not perform inspections to the source). The information is available to all districts' staff: there is a file docket where each file is labeled and numbered and removal of any of them involves signatures. This system also allows easy search on how many applications have been submitted regularly.

After the application is received, the field inspectors inform the permit engineers about specific issues at the source. Only if everything complies with all federal and state rules, MDEQ would issue the permit (which sometimes has to go through the public comment period).

## **II) Prevention of Significant Deterioration (PSD)\***

\* Note: The PSD program implements part C of Title I of the Clean Air Act for new or modified major stationary sources.

### **1. Program Benefits Quantification**

YES 1. In your opinion, is the PSD program an incentive to reduce emissions below major source levels?

Note: MDEQ feels that the PSD program is an incentive to "synthetic minor" a permit, mainly because of the sources' perception that applying for a PSD is always a complex and lengthy process.

NO 2. In your opinion, have PSD permits been used as the authority to implement other priorities such as toxic emission reductions and improved monitoring and reporting?

Note: MDEQ already has a delegated toxic program, which includes T-BACT analysis (Rule 224 - enclosed in Appendix B - lists the requirements for new and modified source of air toxics).

YES 3. In your opinion, does the case-by-case nature of a PSD permit allow you to implement emission reducing programs or controls more quickly than rulemaking?

NO 4. In your opinion, does the PSD program provide communities a mechanism to be involved in improving their own air quality?

Note: MDEQ staff feels that, although there is some help from the citizens, mainly through the appeals, usually they oppose the proposal, and not based on PSD rules. Improving this situation is the on-going citizens training that the state and EPA are providing in different locations throughout the state.

YES 5. In your opinion, has the PSD program contributed to sustaining good air quality?

### **2. Best Available Control Technology (BACT)**

YES 1. Do you require permit applicants to use the "top-down" method for determining BACT? If no, what approach do you require?

Note: As a delegated state, MDEQ is required to use the "top-down"

method. MDEQ follows the Draft 1990 NSR Workshop Manual guidance.

YES 2. Do you commonly use information resources other than the RACT/BACT/LAER Clearinghouse to identify control options, costs, etc.? If yes, what resources do you commonly use and rate the usefulness of each one?

Answer: The RBLC database is the main resource used to identify control options. Additionally, MDEQ uses other states' permit writers information, as well as Internet information. Based on the data collected, MDEQ developed models for different industries. In the past, for cost analyses, MDEQ used vendor quotes, but today this option is not available anymore, as the vendors are reluctant to release the prices.

YES 3. Do you provide a detailed documentation/explanation of draft BACT determinations in the public record?

Note: MDEQ provides a detailed explanation of the BACT determination in the fact sheet.

YES 4. In your public record for draft BACT determinations, do you provide an economic rationale if a BACT option is rejected as being prohibitively expensive?

Note: MDEQ provides technical and economical rationale of any rejected BACT option, unless the most stringent one is the one that is chosen as BACT.

5. What procedures do you use to calculate baseline emission rates for calculation of cost effectiveness values? What do you view as "uncontrolled" emissions?

Answer: MDEQ uses the worst case uncontrolled emissions from the source for determining the baseline emissions. The baseline is calculated using realistic upper boundary assumptions, taking in account all the documented constraints on the source. The uncontrolled emissions are defined in Rule 121 (Appendix B) as the emissions expected to occur without control equipment, unless such control equipment is, aside from air pollution control requirements, vital to production of the normal product of the process or to its normal operation.

YES 6. Do you consider combinations of controls when identifying and ranking BACT options (e.g., low organic solvent coatings plus thermal oxidation)?

YES 7. Do you ever re-group the emissions units included in a cost

evaluation? For example, if an applicant's approach is to evaluate the cost of controlling each unit separately, do you ever consider combining units for control by one control device? Conversely, if an applicant combines all units for control by one control device and concludes this approach is too expensive, do you ever consider controlling individual units or a small group of units that have the greatest percentage of total emissions?

Answer: One permit for which AQD preformed additional BACT cost analysis beyond those completed by the applicant was General Motors - Delta Township, Permit No. 209-00 (Appendix D). The application was for the construction of an entirely new vehicle assembly plant, including a paint shop. Proposed to be included in the paint shop were an electrocoat process (electrocoat dip tank followed by an electrocoat curing oven), a guidecoat process (powder guidecoat booth followed by a cure oven), and a topcoat process (three parallel topcoat spray booths followed by three parallel topcoat curing ovens). Each of the topcoat spray booths includes basecoat zones (both manual and automatic) and clearcoat zones (both manual and automatic). The basecoat coatings were waterborne, while the clearcoat coatings were solventborne. Per federal guidance, GM should have provided a BACT cost analysis evaluating control of the entire topcoat process (the basecoat booths, clearcoat booths, heated flashes, and topcoat cure ovens) together. Because GM did not provide such an analysis, AQD preformed the analysis independently as the reviewer.

One permit for which AQD permit preformed the BACT cost analysis according to Director Harding's memorandum of May 24, 2001 was General Motors - Lansing Craft Centre, Permit No. 198-01. This application was to modify an existing automobile and light duty truck coating process. The coating process consists of an electrocoat process (electrocoat dip tank followed by two electrocoat curing ovens), a guidecoat process (a two-section guidecoat booth followed by a cure oven), and a topcoat process (a two-section topcoat spray booth followed by a topcoat curing oven). The two section topcoat booth consists of a waterborne basecoat zone followed by a solventborne clearcoat zone. The modifications made under this application were an increase in allowed production; an increase in allowed VOC emissions; increasing the length and height of the spray booths, the ELPO tank, and the cure ovens to accommodate a larger vehicle profile; a switch to waterborne basecoat coatings; and a change in paint applicators. Per Director Harding's memorandum, the BACT cost analyses were completed on a "single process" basis. For example, the guidecoat manual zone was looked at separately, without grouping it together with emissions from other sources. Had the BACT cost analyses evaluated logical groupings evaluated together, the results of the BACT analysis for this application may have been different in terms of the control

equipment requested.

YES 8. Do your PSD permits specify emissions limits and control methods consistent with the basis (and capabilities) of the selected BACT options?

Note: Both General Motors permit Nos. 209-00 (Delta Township) and 198-01 (Lansing Craft Centre) contained permit conditions to restrict their operations to those determined to be BACT. The permit restrictions include requirements/conditions similar to those listed below -

Pollutant	Equipment	Limit	Time Period	Compliance Method	Applicable Requirement (s)
VOCs	EU-Electrocoat	0.04 Pounds of VOCs Per Gallon of Applied Coating Solids (GACS)	Based upon a Monthly Averaging Period	Special Condition No. 1.17	R336.1205, R336.1224 R336.1225, R336.1702(a), 40 CFR Part 52.21, 40 CFR Part 60 Subpart MM
VOCs	EU-Electrocoat	30.3 Tons	Per 12-Month Rolling Time Period	Special Condition No. 1.17	R336.1205, R336.1225, R336.1702(a), 40 CFR Part 52.21, 40 CFR Part 60 Subpart MM

- The applicant shall not operate the electrocoat dip tank and/or the electrocoat curing oven portions of EU-Electrocoat unless ELPO Thermal Oxidizer No. 1 is installed and operated properly. Proper operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95% (by weight), and maintaining a minimum temperature of 1400 degrees F and a minimum retention time of 0.5 seconds.
- All waste coatings and materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable

state rules and federal regulations.

- The applicant shall operate the electrocoat dip tank such the adequate positive flow of air into the electrocoat dip tank occurs whenever EU-Electrocoat is in use. Positive airflow shall be demonstrated according to a method acceptable to the District Supervisor. In addition, the applicant shall keep all access doors and windows on the electrocoat dip tank closed whenever the electrocoat process is in operation.

9. How do you establish the compliance averaging times for BACT emissions limits?

Answer: Michigan Rule 205 (Appendix B) sets the general requirements for emission limits compliance. They include the test methods and BACT (PSD) increments. Any Permit to Install must contain emission limits that are enforceable as a practical matter. The time period is set in accordance with the applicable requirements and, unless a different time period is provided by the applicable requirement, should generally not be more than 1 month, unless a longer time period is approved by MDEQ. A longer time period may be used if it is a rolling time period, but shall not be more than an annual time period rolled on a monthly basis. If the emission limit does not reflect the maximum emissions of the process or process equipment operating at full design capacity without air pollution control equipment, then the permit must contain a production limit or an operational limit.

YES 10. Do you make sure that permit conditions impose restrictions consistent with BACT evaluation assumptions? For example, if the annual emissions used in a BACT cost evaluation are based on an assumption of less than continuous operation and/or operation at less than maximum capacity, do permit conditions contain limits based on the assumption used?

Note: Besides the annual emissions limits, MDEQ also pays attention to permit limits such as seasonal operation, capacity limitations, raw material usage, as well as destruction efficiency or transfer efficiency.

For questions 11-16 regarding BACT cost evaluations:

YES 11. Do you allow deviation from EPA's recommended cost evaluation procedures? If yes, please explain.

Answer: MDEQ allows deviations from cost evaluation guidelines only for companies that can demonstrate the reason. For example, in the

Upper Peninsula, a scrubber used as control equipment can freeze during the cold season.

12. Do you place primary reliance on total or incremental cost effectiveness values? If you give greatest (or equal) weight to incremental costs, what is your basis for doing so?

Answer: MDEQ places primary reliance on total costs, but the incremental cost is taken in consideration, too. There is not a specific number to determine if a cost is effective, but a range of numbers; the cost effectiveness is determined ultimately on a case-by-case basis.

13. Do you place primary reliance on a comparative cost approach or a "bright line" test?

Answer: As all the states in Region 5 do, MDEQ places primary reliance on a "bright zone" instead of a "bright line", because is using a range of numbers, rather than one specific number.

- YES 14. If you place greatest importance on a comparative cost approach, do you try to obtain cost data for projects outside your permitting jurisdiction?

- YES 15. If you use what can be described as a "bright line" test, what is the basis of your "bright line" cost effectiveness value and do you change the value over time to account for inflation?

Answer: MDEQ is using the OAQPS Cost Manual to determine the cost effectiveness. The values are not adjusted for inflation, but other factors such the interest rates are updated.

- YES 16. Do you use a different cost approach for different pollutants? If yes, please explain.

Answer: Although uses one model (Cost Manual guidance), MDEQ determines costs on a case-by-case basis, and cost effectiveness is based on the characteristics of each process.

17. Under what circumstances do you conduct a BACT cost evaluation independent of the cost evaluation provided by the applicant? (An independent evaluation could entail obtaining additional vendor quotes.)

Answer: MDEQ does not rely on the applicants' final numbers. MDEQ staff always reruns the cost analysis. Whenever possible, the MDEQ will seek vendors' quotes to verify the costs. However, that has become

increasingly difficult as vendors are unwilling to provide such information due to the unrecouped cost of the effort and the possible ramifications from potential customers. Also, the information is not as reliable as would be perceived as the vendors recognize that they must meet the demands of their current or future customers when providing or not providing equipment. To bolster the review, MDEQ relies upon the available tools of the OAQPS Cost Model, the RACT/BACT/LAER Clearinghouse, and experience with similar operations.

- YES 18. Are cost estimates required to be referenced to a common baseyear (e.g., 1998) so that cost estimates can be easily compared?
- YES 19. Are other agencies contacted to determine if their cost estimates need to be normalized before comparisons can be made?
- YES 20. Do you perform a BACT assessment for all new/modified emissions units or activities emitting a pollutant subject to PSD review no matter how small the emissions from an affected unit or activity?
- YES 21. Do you consider increases or decreases in corollary toxic/hazardous air pollutants as part of a BACT evaluation? [This question addresses implementation of EPA's "North County Resource Recovery Remand" memo dated September 22, 1987.] If yes, please give a specific example.

Note: Based on Michigan specific rule (Rule 225, Appendix B), MDEQ considers T-BACT as part of BACT analysis. An example is the permit for GM Grand River (PTI 134-99B), where the acetone emissions increase was taken into account in the BACT analysis.

- YES 22. Do you provide BACT evaluation training to new (or newly-assigned) new source review (NSR) permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

Answer: Other than an intensive on-the-job training, the new staff is exposed to any available internal training, and meetings or calls involving BACT evaluation discussions.

- YES 23. Do you provide BACT evaluation refresher training to experienced NSR permitting staff? If yes, how frequently do you provide this training and what is the nature of the training provided?

Answer: MDEQ's experienced staff members are required to take updated



permit training. One example is the computerized training in regards to changes to OAQPS model for cost analysis.

YES 24. Do you provide an information outreach program on BACT evaluations for owners of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

Answer: MDEQ provides many opportunities every year for the industry representatives to learn about BACT analysis through workshops, and MDEQ's webpage information ([www.michigan.gov/deq](http://www.michigan.gov/deq), or July 24, 2003 informational letter enclosed in Appendix C that lists the available workshops). One example of these workshops is the October 2003 PSD Workshops; flyers and workbook are enclosed in Appendix E.

YES 25. Do you provide an information outreach program on BACT evaluations to the public? If yes, how frequently do you provide such information and how do you provide it?

YES 26. Do you enter each BACT determination in the RACT/BACT/LAER Clearinghouse?

YES 27. Before establishing BACT as work practice, design, or operational standards do you determine that emissions limits (e.g., lbs/mmBTU, lbs/hr) are not feasible? If no, please explain.

YES 28. Do you apply BACT to fugitive emissions? If no, please explain.

Answer: Generally, the main two areas for which fugitive emissions are included in the BACT analysis are: chemical plant valves and fittings (MDEQ has not have a NSR permit in the recent past) and fugitive dust material handling plants for the 28 category facilities, which is generally handled with an acceptable fugitive dust abatement plan.

### **3. Class I Area Protection for PSD Sources**

1. How do you determine which proposed projects need a Class I impacts analysis, including consideration of distance of the source from Class I areas (e.g., maximum distance criteria)? Please explain.

Answer: MDEQ considers that the any major project within 100 km from a Class I Area must include a Class I impacts analysis. Currently there are two Federal Class I areas in Michigan: Isle Royale (national park), and Seney (national wilderness area).

YES 2. For new or modified sources within 10 kilometers of Class I areas do you require sources to submit an impact analysis for all pollutants to determine if any have impacts greater than 1 ug/m<sup>3</sup>?

Answer: For new or modified sources that may affect a Class I area, MDEQ requires any applicant to perform a preliminary analysis to determine whether the source may increase the ambient concentration of any pollutant by 1ug/m<sup>3</sup> or more.

YES 3. Do you require applicants to submit a Class I increment analysis for each pollutant subject to PSD review for which an increment exists?

Answer: MDEQ requires applicants to submit a Class I increment analysis (including any necessary cumulative impact analyses) if a significant ambient impact is predicted.

YES 4. Do you require applicants to identify and provide a cumulative impacts analysis (maximum impact within Class I areas) for all Class I areas impacted by the source?

YES 5. Do you have a formal procedure for notifying Federal Land Managers (FLMs)? If yes, please explain.

Answer: MDEQ follows the requirements of 40 CFR 52.21 (p) (Appendix B). The department sends the FLM a copy of any advance notification that an applicant submits, and a complete copy of all relevant information within 30 days of receiving it, and at least 60 days before any public hearing on the proposed source.

NO 6. Do your permitting procedures require the applicants to notify Federal Land Managers? If yes, please explain.

Note: MDEQ provides FLM with the information.

YES 7. Is there communication, consultation, and discussion between you and FLMs? If yes, to what extent (e.g, high, moderate, minimal).

Answer: Due to the fact that it rarely occurs, MDEQ staff can't describe the extent. Nevertheless, MDEQ believes in a "pre-application stage", where the applicant, the FLM, and MDEQ meet to discuss about the permit and permitting procedures.

YES 8. Is there communication, consultation, and discussion between the applicant and FLMs? If yes, to what extent (e.g.,

high, moderate, minimal)?

Answer: Although not required by regulation, MDEQ highly recommends and fosters a constant communication between the applicant and the appropriate FLM.

YES 9. Do you actively seek input from FLMs during the permitting process?

Note: MDEQ follows the recommendations from the NSR Workshop Manual (below).

*A reviewing agency's policy regarding Class I area impact analyses can ensure FLM involvement as well as aid permit applicants. Some recommended policies for reviewing agencies are:*

- *not considering a permit application complete until the FLM certifies that it is "complete" in the sense that it contains adequate information to assess adverse impacts on AQRV's;*
- *recommending that the applicant agree with the FLM (usually well before the application is received) on the type and scope of AQRV analyses to be done;*
- *deferring to the FLM's adverse impact determination, i.e., denying permits based on FLM adverse impact certifications; and*
- *where appropriate, incorporating permit conditions (e.g., monitoring program) which will assure protection of AQRV's. Such conditions may be most appropriate when the full extent of the AQRV impacts is uncertain.*

*In addition, the reviewing agency can serve as an arbitrator and advisor in FLM/applicant agreements, especially at meetings and in drafting any written agreements.*

YES 10. Is the applicant required to address potential adverse impacts on air quality related values (AQRVs) that are identified by the FLM during the notification process?

YES 11. Do you require prior approval of Class I area impact analysis procedures that applicants plan to use?

YES 12. Do you require applicants to perform a visibility analysis for Class I areas?

NO 13. If a visibility impairment is indicated, do you require the applicant to notify the appropriate FLM for the Class I area?

Answer: MDEQ notifies the appropriate FLM.

YES 14. Is the applicant required to address potential effects on scenic vistas associated with Class I areas that may have been identified by the FLM during the notification process?

Answer: Identified in 40 CFR 81, Subpart D, the two Class I areas in Michigan (Isle Royale and Seney) require visibility impact analysis for the integral vista. If the appropriate FLM determines that a proposed source will adversely impact visibility and MDEQ concurs, the permit is not issued. If MDEQ does not agree with FLM, MDEQ has to explain its decision in the notice of public hearing.

YES 15. Do you have a formal process for handling Class I area increment violations if predicted?

Answer: Section 165(d)(2)(C)(ii) of the Act provides that, notwithstanding that the emissions from a proposed facility do not cause or contribute to exceedance of the Class I increment in an area, a permit shall not be issued in any case where the Federal Land Manager of a mandatory class I area demonstrates to the satisfaction of the State that the emissions from the facility will have an adverse impact on the air quality related values(including visibility) of the class I area. If the proposed source would cause or contribute to Class I increment violation, the applicant has to prove otherwise.

NO 16. Have you issued PSD permits where the FLM objected? If yes, please explain and identify the projects.

#### **4. Additional Impacts - Soils, Vegetation, Visibility, Growth**

NO 1. Do your PSD application forms specifically require information regarding additional impacts? If yes, include a copy of the forms.

Answer: In the draft permits, MDEQ includes state Rule 901 as a general requirement. An example is enclosed in Appendix D (Permit 454-96C for Ford Motor Company): this permit's General Condition 6 states that operating the source cannot result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property.

YES 2. If no, do you require applicants to submit sufficient information necessary to complete an additional impact analysis?

3. What resources do you use for researching additional

impacts?

Answer: MDEQ uses toxicological and vegetation data, as well as expert opinions on local soils and vegetation.

YES/NO 4. Do you include environmental justice and/or endangered species issues in your analysis?

Answer: Although MDEQ does not specifically include EJ and endangered species issues in a permit analysis, it allows an "enhanced review" of a permit application, sometimes with additional opportunities for the public to comment or to express their concerns.

YES 5. Has an additional impact analysis in the last 5 years been a cause for concern in an issuance of a PSD permit? If yes, please explain.

Answer: In the case of the facilities below MDEQ looked at the blood lead level when issuing the permits.

<i>Genesee Power</i>	<i>1995</i>
<i>Central Wayne</i>	<i>1997</i>
<i>Select Steel</i>	<i>1998</i>
<i>City Medical</i>	<i>1999</i>

YES 6. Do you generally allow arguments that the protection of the NAAQS will assure protection of vegetation? If yes, please explain.

Answer: Generally, MDEQ finds sufficient the secondary standard for NAAQS as an adequate demonstration for protection of vegetation and soils. However in one case, Cadillac Renewable Energy 373-86C, the analysis included EPA 450/2-81-078 "A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals: Final Report" established ambient concentrations for SO<sub>2</sub> to indicate insignificant impact.

YES 7. Do you require that predicted short-term impacts (e.g, one hour NO<sub>x</sub> impacts) be used to assess impacts on vegetation for pollutants which do not have short term ambient standards? If no, please explain.

NO 8. Regarding visibility impacts, do you require assessments for vistas (e.g., parks, airports) near the proposed source or modification? If no, please explain.

Answer: Generally, MDEQ requires assessments for vistas only for Class I areas.

## 5. Preconstruction Monitoring

NO 1. Do you have formal preconstruction monitoring requirements?

Answer: Although MDEQ does not require preconstruction monitoring for each permit, the permit writers use available monitoring data to verify if the predicted ambient impact or the existing ambient pollutant concentrations are less than the prescribed significant monitoring concentrations (as defined in 40 CFR 52.21 (i)(8)(i)).

N/A 2. Do you have a formal public participation process regarding requirements for preconstruction monitoring for specific proposed projects?

N/A 3. Have you ever consulted with FLM regarding preconstruction monitoring requirements for a proposed source or modification?

NO 4. In the last five years have you ever required an applicant applying for a PSD permit to conduct preconstruction ambient monitoring or meteorological monitoring?

Answer: MDEQ recalls one preconstruction monitoring required for a PSD permit (Champion Corporation, in the 1980s).

NO 5. Do you have a formal approval/denial process at the conclusion of preconstruction monitoring?

Note: MDEQ has an informal process. The approval/denial process at the conclusion of preconstruction monitoring is part of the PSD permitting process.

N/A 6. Do you have a formal process during preconstruction monitoring for resolving conflicts between the FLM and the applicant? If yes, please explain.

YES 7. Do you routinely provide ambient monitoring data in lieu of requiring applicants to perform preconstruction monitoring? If yes, please briefly describe the monitoring network used and the basis for the monitoring value selected.

Answer: MDEQ uses AIRS database for the most representative data; the values include emission inventory, background check, and state borders.

YES 8. Do you follow EPA guidance (e.g., siting, equipment, data validation, audits) regarding collection of

preconstruction monitoring data?

9. Under what circumstances would you require post construction ambient monitoring as a condition of a PSD permit?

Answer: MDEQ requires post construction monitoring if the NAAQS are threatened, or there are uncertainties in the data bases for modeling. One example is Zeeland Farm Inc (PTI 479-95A) where post construction modeling was required because the source was in danger to violate the PSD increments.

#### **6. Increment Tracking Procedures**

1. What method do you use to assign baseline dates, e.g., county-specific, region-specific, or entire state?

Answer: MDEQ uses region-specific method to assign baseline dates.

YES 2. Do you have a list of the minor source baseline dates for each area?

YES 3. Do you have an understanding of receptor location dependence vs. source location dependence for increment tracking?

4. Do you have a formal or informal program for increment tracking?

Answer: MDEQ is informally tracking the increment consumption, based on the baseline and permit application data.

YES 5. Do you maintain and update a computerized emission source database for increment tracking that includes minor sources that affect increment? If yes, does the database include the information needed for modeling (e.g., source locations, stack parameters, emissions)?

6. Do you use allowable or actual emissions for increment tracking purposes? If actual emissions, how do you calculate emissions for each averaging period covered by the increments?

Answer: MDEQ uses both, allowable and actual emissions, depending on the source. For the permitted sources, allowable emissions (PTE) are used, and for sources that are not permitted, actual emissions are used (by determining hourly emissions: tons per year divided by 8760 hours per year).



- NO     7.     Are area sources included in increment tracking analyses, e.g., growth-related and transportation-related emissions?
8.     How frequently is increment consumption evaluated - on a scheduled basis or just when occasioned by a new permit application?

Answer: MDEQ evaluates the increment consumption when a permit application is received.

9.     How "transparent" (i.e., understandable) is the emission source inventory used for PSD modeling? Could an outside reviewer (such as a member of the public) clearly identify the sources included (e.g., name, location, stack parameters) and the sources excluded in a modeling analysis?

Answer: The emission source inventory is developed to be easily understood by the citizens.

10.    How do you handle interstate increment tracking (for state reviewing authorities) or interjurisdiction tracking (for local reviewing authorities), including consistency of tracking across jurisdiction boundaries?

Answer: MDEQ is making any necessary efforts to have a good working relationship with the neighboring states and Canada. This includes notifying the affected state of any permit applications, and dialogs related to the permit or permitting issues involved. Although in the past Canada was not regularly discussing environmental issues with the American counterparts, now there are current commitments from both sides to build a stronger relationship with respect to the NSR permits. For example, an informational meeting with MDEQ, Environment Canada, and EPA Region 5 representatives was scheduled for Spring 2004.

11.    What procedure do you follow in planning for and incorporating new modeling tools?

Answer: The air modeling team can develop new modeling tools based on the federal guidance and existing models (for example AERMOD, a national screening model, is currently in the development stage, and MDEQ is involved in the process)

- YES   12.   Do you provide increment tracking training to NSR permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

Answer: The nature of training for the permit engineers and modeling staff is described below:

*Permit Engineers* - part of general PSD training which include:

- EPA courses and workshops
- State PSD training
- On-the-job PSD training

*Modeling Staff* - part of NSR modeling training

- National modeling workshops
- On-the-job

**7. Endangered Species Act (ESA)**

- NO 1. Do you have a PSD program that is fully approved by EPA (i.e., SIP-approved?
- YES 2. Do you have a fully or partially-delegated PSD program? (Note: ESA obligations apply only when all or portions of a PSD program have been delegated.) If yes, answer questions 3 through 6 below.
- NO 3. Do you notify PSD permit applicants of their ESA obligations? If so, please provide a copy or description of your notice.

Note: MDEQ stated they have not encountered instances when a PSD had ESA implications.

- NO 4. Do you know the difference between a formal vs. an informal consultation process?
- NO 5. Do you advise applicants, concerning their ESA obligations, to consult with a.) EPA; b.) The U.S. Fish and Wildlife Service; and/or c.) Federal Land Manager? If yes, please explain, and describe what information you provide to applicants concerning their ESA obligations.
- NO 6. Does an ESA consultation affect the timing of your issuance of a proposed or final PSD permit? If yes, please explain.

### **III) Nonattainment NSR**

At the time of the audit Michigan had no non-attainment areas. Prior to the audit MDEQ and EPA agreed that it was inappropriate and counterproductive for these questions to be answered. The audit captured a moment in time - July 21 and 22, 2003. At that time, MDEQ did not have a confident working knowledge of the non-attainment permitting process as the entire state of Michigan had been in attainment for all pollutants since 1999 and there were no non-attainment NSR applications in over five years. Furthermore, there was a large lag time before the designation of non-attainment areas and the release of the ozone and PM2.5 implementation rules outlining the approach Michigan must take. It was recognized by all that prior to the re-designations taking effect, significant training of staff on the Clean Air Act requirements, Appendix S requirements, new ozone and PM2.5 Implementation Rules, State Rules and any EPA guidance regarding non-attainment permitting would be needed. The training occurred after the July 21 and 22, 2003 audit.

**IV). Minor NSR Programs**

**1. NAAQS/INCREMENT Protection**

- YES 1. Do you use modeling to assure that minor sources and minor modifications will not violate the NAAQS?
- YES 2. As a result of modeling are air quality monitors required for some sources as a permit condition?
- YES 3. For the pollutants with PSD increments established do you have a list of areas where the minor source baseline has been triggered?
- YES 4. Do you model minor sources for PSD increments if the minor source baseline is triggered?
- YES 5. Do you have procedures in place to identify minor sources that consume or expand PSD increment?
6. How does the public access a list of sources that affect PSD increments?

Answer: The public has access to the list of sources that affect PSD increments through a FOIA request.

**2. Control Requirements**

- YES 1. Does your SIP require any level of control for emissions units not subject to major NSR requirements (e.g., BACT or LAER)? For example, do you have a BACT or similar requirement for minor modifications?

Answer: For the emission units not subject to major requirements MDEQ requires different levels of control, established by the T-BACT (or toxic BACT) analyses, minor sources BACT analyses for VOC and PM, sulfur requirements, as well as the applicable rules R336.1801 and R336.1802, establishing NOx emission limitations from stationary sources (enclosed in Appendix B). It would not be very often that a minor source would come under these latter rules.

- YES 2. Are there any monitoring or reporting requirements for minor sources?

Note: MDEQ requires periodic monitoring for all types of emission units.

YES 3. Does the application or permitting process require modeling for minor sources?

YES 4. Do you require minor sources with Federally applicable permit limits for MACT, NSPS, or NESHAP to report compliance?

Answer: The requirement is one of the General Conditions in every permit (Rule 207, enclosed in Appendix B). Rule 207 states that MDEQ will deny an application for a permit to install if the equipment for which the permit is sought will not operate in compliance with the rules of the department or state law, the operation of the equipment for which the permit is sought will interfere with the attainment or maintenance of the air quality standard for any air contaminant, or the equipment for which the permit is sought will violate the applicable requirements of the clean air act; also, if sufficient information has not been submitted by the applicant to enable MDEQ to make reasonable judgments, the permit application would be denied.

In addition, specific industries (such as the asphalt portable plants) are required to have more controls through T-BACT analyses, HAPs testing, PM or CO limits.

## V. Public Participation

### 1. Public Notification

1. What criteria are used to determine if a permit is public noticed?

YES Are new nonattainment NSR and PSD permits noticed?  
YES Are major modifications noticed?  
YES Are synthetic minor permits noticed?  
YES Are netting permits noticed?  
YES Are minor permits noticed?  
Other?

Answer: MDEQ public notices all the controversial permits, regardless of the PTE status, and also all the sources exceeding 90% of the applicable threshold.

- YES 2. Do you publish notices on proposed NSR permits in a newspaper of general circulation?

Note: MDEQ uses at least two daily local newspapers, and a weekly newspaper.

- YES 3. Do you use a state or other publication designed to give general public notice? If yes, please describe.

Answer: MDEQ uses the Internet (<http://www.michigan.gov/deq>), along with the department's newsletter, "Calendar", online and hard copy publication, (enclosed copy, Appendix E), direct mailing lists to Canada, affected states, concerned citizens, and local government organizations.

- YES 4. Do you have procedures for notifying the public when major NSR permit applications are received?

Note: MDEQ usually posts relevant information on the website.

- YES 5. Have you developed a mailing list of interested parties for NSR permit actions [e.g., public officials, concerned environmentalists, citizens]? If yes, how does one get on the list?

Answer: MDEQ adds a name on the list upon request, usually at the public

hearings.

YES 6. Aside from methods described above, do you use other means for public notification? If yes, what are they (e.g., post notices on your webpage, email)?

Answer: MDEQ uses the webpage as a mean for public notification (see enclosed July 24, 2003 letter, Appendix E).

YES 7. Do your public notices clearly state when the public comment period begins and ends?

Answer: MDEQ clearly states in the "Notice of Air Pollution Comment Period and Public Hearing" when the comment period starts and ends, basic information about the company, as well as information about the public hearing. An example of public notification notice is enclosed in Appendix D (PTI 114-03 for Fairmount Minerals).

8. What is your opinion on the most effective ways to provide public notice?

Answer: MDEQ feels that the best most effective way to provide public notice is through the Internet (webpage).

NO 9. Do you provide notices in languages besides English?

Answer: Although MDEQ does not provide translation of the notices, the non-English speaking citizens can obtain translated information by calling the office. MDEQ's webpage contains these info in different languages.

YES 10. Have you ever been asked by the public to extend a public comment period? If yes, did you grant the extension? If no, please explain?

Answer: MDEQ is usually granting the extension requests based on need (for example for citizens that just found out about the project, or if, during the public period not all the information were available for the public, or due to natural causes, the public hearing cannot be held; a notification example of an extended comment period for Minergy Detroit, June 12, 2003 is enclosed in Appendix E.

11. What approximate percentage of your major NSR permits are revised due to public comments? Remands? State appeals?

Answer: MDEQ staff feels that 40-50% of the permits are revised due to the comments (mostly changes on testing, recordkeeping, and monitoring), and only a very few changes were made due to remands or



appeals.

12. If a draft permit is revised, what criteria do you use to determine if a permit should be re-issued in draft?

Answer: MDEQ considers re-drafting a permit only if the comment resulted in a major change to the permit (such as appreciable increase in emission rate, or significant changes in terms and conditions of the permit).

13. What type of comments or other concerns trigger a public hearing?

Answer: Any concerned citizen or organization can request a public hearing. If there is a general concern, MDEQ holds an informational meeting before the public hearing.

14. How are public hearings noticed? How much notice is given?

Answer: As mentioned in the answer to question 7, MDEQ uses a joint notification for public hearings and public comment period. The minimum time for noticing the public is 30 days. An example is enclosed in Appendix E, for Fairmount Minerals, PTI 114-03.

15. What is your process for the public to obtain permit-related information (such as permit applications, draft permits, deviation reports, monitoring reports) especially during the public comment period?

Answer: The public or any interested party can find the permit related information through a FOIA request, MDEQ webpage, mass mailing, and inquiries to the local government. Sometimes copies of the files are available at local public libraries. The permit applications are available upon request as hard copy at MDEQ office.

- YES 16. Do you have a website for the public to get permit-related documents? What is available online? How often is the website updated? Is there information on how the public can be involved?

Answer: The online info contains the public notice, the fact sheet, the draft permit, and contact information (see enclosed printed copy of the NSR Public Notice Documents, Appendix E). For the last 2 years the website info is updated almost daily. The permit applications are not available electronically yet. The public is also notified about the opportunity to be involved in the process through the letters to all who submitted comments and previously attended public hearings.

YES 17. Do you provide training to citizens on public participation or on NSR? If yes, approximately how many training opportunities have been provided in the last five years.

Answer: MDEQ provided numerous training opportunities to the public through various NSR workshops (at least 4/year). Specific training information is also available in MDEQ webpage.

18. How do you notify affected States (including tribes and Canada) of draft permits?

Answer: MDEQ notifies affected States through emails and direct mail.

YES 19. Do public notices for PSD permits specifically state the amount of increment consumed?

Answer: MDEQ notifies the public that the permit is not violating the NAAQS and would not exceed available increments (in percentage). An example of public notice is enclosed (Quanex Corporation, PTI 535-96G), in Appendix D.

YES 20. Are public notices for PSD permits sent to each party identified in 40 CFR 51.166(q)(2)(iv)?

## **2. Environmental Justice (EJ)**

Note: By EJ analysis we refer to any procedures applied during the permitting process, regardless of whether they are called EJ, that consider demographics (race, income, nationality, etc.), cumulative effects (burden, exposure, risk), comparative effects or modifications to the public involvement processes to address unique characteristics of the project.

YES 1. Do you consider EJ issues during the permitting process? If yes, please provide a description of the criteria, guidelines, or screening procedures used to address EJ issues.

Answer: MDEQ considers EJ issues (or "enhanced reviews") during a permitting process. In these reviews MDEQ takes in account cumulative effects of pollutants and performs risk assessments. MDEQ provides sufficient and extensive public notification.

N/A 2. Regarding section 173(a)(5) of the Clean Air Act, do you conduct an alternatives analysis as part of your nonattainment area permitting process? If yes, please provide a description of the EJ criteria or guidelines used

for this analysis.

Answer: At the time of the audit MI was designated as attainment area. Nevertheless, State Rule 220 (1)(d)(Appendix B) requires specific sources to prove that "the benefits of the proposed major offset source or major offset modification significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification".

YES 3. Regarding section 165(a)(2) of the Clean Air Act, does your NSR permitting program and public comment process for PSD regulated pollutants provide for consideration of alternatives?

4. How are the demographics of the affected community taken into account in the permitting process?

Answer: The demographics are not taken in consideration in the permitting process.

5. How are cumulative effects and/or pre-existing burden addressed in the permitting process?

Answer: MDEQ does not issue permits for sources that affect the health and welfare of the citizens. In the permitting process, MDEQ includes modeling and tests on the background emissions levels.

6. What additional community information and/or demographics (for example - children, the elderly) do you consider important for an EJ analysis?

Answer: MDEQ takes in consideration risk factors for elderly and children, as well as hospital statistics and information.

YES 7. Do you allow public involvement during an EJ analysis? If yes,

a. What stakeholder groups do you try to involve?

Answer: MDEQ takes in consideration the input from any interested party (usually environmental groups and citizens).

b. At what point in the EJ analysis or permitting process do stakeholders become involved?

Answer: MDEQ advises companies going through large projects to involve interested citizens or environmental groups early on the process.

- c. To what degree and in what manner do stakeholders or the community influence the permit decision making process?

Answer: The shareholders and communities can influence the permit decisions through the comments made during the public comment period.

- d. To what degree do you know about how stakeholders or the affected community participated in the permit decision making process?

Answer: MDEQ encourages any applicant to involve the citizens and the public in general, in the process. To facilitate this, MDEQ assigned engineers set up meetings with the company and interested parties. One example is Ford Company and Access (an environmental citizens group), where the company informs the organization about projects and deadlines.

- e. Describe how you make information available to stakeholders and the affected community. (For example - translation of information, understandable and accessible materials, personal contacts, clearly explained technical information including potential risk, distribution of information, public meetings, etc.)

Answer: MDEQ makes the information available to public through many channels: libraries, direct mailing, informational meetings, newspapers, and, as much as possible, on the MDEQ's webpage. One example of the public notification efficiency is the meeting for a Cadillac permit (year 2000), where 600 people attended and submitted comments.

- NO 8. In the EJ analysis, do you consider direct and indirect benefits and burdens from the proposed actions? If yes,
- a. Describe what benefits you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)
  - b. Describe what burdens you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)

Answer: In the EJ analysis, MDEQ takes in consideration only the environmental impacts.

- NO 9. In the EJ analysis, do you consider comparative and

disproportionate impacts? If yes,

- a. Describe the criteria or procedures used to determine any potential or actual adverse health or environmental effects or impacts.
- b. Describe the criteria or procedures used to determine whether evidence exists to describe these effects or impacts.
- c. Describe the criteria or procedures used to determine whether the proposed project complies with all applicable environmental laws.

**VI). Program Staffing and Training Issues**

1. What is the total number of staff dedicated to permitting for your NSR program? Please provide an organizational chart.

Answer: In 2003, the Permit Section had approximately 25 permit engineers, 5 supervisors, 4.5 implementation (engineers and analysts) staff, and 2.5 clerical support staff. One additional position had been vacant for over a year (total 39 people/38 Full Time Equivalent Positions). There is a number of other staff within the Division that works on NSR permits, as needed. The organizational chart is enclosed (Appendix C).

2. For your NSR program please breakdown the staff into the different job functions (e.g., number of modelers, review engineers, technicians, environmental scientists, clerical, supervisory, enforcement).

Answer: The NSR program staff members are divided into different job functions as follows:

<i>Engineering Supervisors</i>	5
<i>Clerical</i>	2.5
<i>Department Analysts</i>	2
<i>Environmental Engineers</i>	28.5
<i>Environmental Quality Analysts</i>	7
<i>Other (modelers, lab scientists, toxicologists)</i>	5
Total 50 positions - 52 employees	

In FY 02, approximately 23 out of 40 staff positions were funded by fees. The balance was funded by Section 105 grant and related general fund match and general funds.

3. Please describe your training program for new and existing staff who work on NSR permitting and issues. List any materials you use or training course you try to attend.

Answer: The new and existing employees training program is establish at the beginning of each year. Appendix E includes the 2002 training schedule and program. The 2002 training schedule for NSR permit engineers gives detailed information about the subject (e.g. CAA, PM Permits, or Combustion), the time and the trainer. Employee training plan is a more general plan that defines the recommended and elective training sessions for new employees of different units within MDEQ for a 2-year period.

4. Describe any additional training that you believe would be beneficial. Would you like for EPA to provide more NSR training?

Answer: MDEQ staff feels that an additional NSR Reform training would be helpful.

- YES
5. Do you provide NSR program training opportunities for the public, including the regulated community? If yes, please describe.

Answer: MDEQ provides monthly PTI Workshops in various locations for citizens, environmental groups, and regulated communities (enclosed 2003 flyers, in Appendix E).

6. Total number of staff w/ 3(?) years or more of experience"  
5 yrs? 10 yrs?

Answer: In 2003, the number of MDEQ employees with less than 3 years experience was 6, with 3-5 years experience was 3, and 5-10 years experience was 10. There are 33 employees with more than 10 years work experience (total 52 employees).

**VII). General NSR Program Issues**

- YES 1. Do you implement EPA issued program guidance and policy for NSR? In no, please explain.
2. In general, how do you learn about federal NSR rule changes? Do you use EPA's TTN website at [www.epa.gov/ttn](http://www.epa.gov/ttn) to monitor NSR program changes and implementation issues? Do you find the info on the TTN adequate? Is there any other information you would like to see provided?

Answer: MDEQ staff finds out about federal rule changes through direct mail from US EPA, state calls, TNN webpage, or reform guidance. Each of the above sources, independently, may not be enough.

3. How do you determine if emissions factors (e.g., AP-42) are acceptable for NSR applicability purposes?

Answer: MDEQ determines if emission factors are acceptable on a case-by-case basis. This includes relying on stack tests performed at that facility or on similar operations, continuous emission monitoring data, the FIRE database, the RACT/BACT/LAER Clearinghouse, other reported emission factors, and Michigan's emission reporting database.

4. Please provide any comments, suggestions, or concerns you may have regarding the NSR program.

Answer: MDEQ engineers feels that one concern is the inconsistency of program application across the regions.

5. Please provide the number of non-major permits you issued last year.

Answer: In 2002, MDEQ issued about 450 non-major permits. Since 1993, 1450 permits were issued.

6. How many PSD permits did you issue last year?

Answer: MDEQ issues an average of 15 permits each year (including last year).

7. How many nonattainment NSR permits did you issue last year? Since 1990?

Answer: At the time of the audit Michigan was considered attainment area. There is no centralized database to count the number of NAA NSR



permits issued before the attainment area designation.

8. For PSD permits what is the average time (months) taken by you to issue the permit, starting from the time the application was determined complete? For nonattainment NSR permits?

Answer: At the time of the audit Michigan was considered attainment area. For the PSD permits, the average time to issue a permit depends on the type of source and complexity of the permit. For example, for auto assembly plants, it takes an average of 32 days to review (68 days to issue), and for non-auto sources, about 109 days (160 days to issue). Usually it takes a long time for the company to review the draft permit conditions. This time was not included in the above average time. Including this time, it takes 384 days to issue an auto source permit and 363 days for non-auto sources. For more details see enclosed Tables K1 and K2, in Appendix C.

- YES 9. Do you have a formal procedure for establishing past permit violations related to NSR requirements?

Note: MDEQ uses an enforcement database and established formal inspection procedures based on the enforcement policy.

- YES 10. Do you have a formal procedure for dealing with "self reported" NSR violations?

- YES 11. Do you have formal enforcement procedures for dealing with past violations of NSR requirements, including applicable BACT or LAER requirements of major NSR?

- YES 12. Do you include PM10 condensible emissions in the total amount of PM10 emissions when determining PSD applicability, BACT, PSD increment, and NAAQS?

- YES 13. When PM10 testing is required do you include a permit condition that requires testing and specifies testing methods for PM10 condensibles?"

**VIII). Effective Construction Permits**

General Comment: MDEQ believes they do incorporate all of the criteria below in their permits. As a list of examples, MDEQ provided the entire list of permit applications public noticed and issued in the calendar year 2003 (Table VII. 1). All of these have been sent to the regional office as part of the public noticing process.

TABLE VII. 1

COMPANY NAME	PTI #	END of COMMENT PERIOD	HEARING HELD	REASON
SUMPTER ENERGY	62-01A	12/22/03		PSD
QUANEX CORP	535-96 G	12/5/03		PSD
GEORGIA-PACIFIC	57-02	12/5/03		DENIED, state rules
CENTRAL WAYNE (COMBO CONSENT ORDER)	190-95 A	12/1/03	YES	PSD
GM POWERTRAIN SAGINAW	109-03	11/14/03		PSD
GUARDIAN FIBERGLASS (COMBO ROP)	282-02	11/5/03	YES	PSD
LOUISIANA PACIFIC	41-03	10/13/03		PSD
ABBOTT LAB-ROSS PRODUCTS	64-03	9/15/03		PSD
DTE ENERGY CONNERS CREEK	114-99 A	8/22/03		PSD
ANR PIPELINE	35-03	8/14/03		PSD
DEARBORN INDUSTRIAL (DIG)	253-02 A	8/4/03	YES	Netting
MINERGY	175-00 A	7/29/03		PSD
GENERAL PERMIT PROPANE OR NATURAL GAS FIRED BOILERS		7/28/03		Rule requirement
SPARTAN STEEL	423-95 A	7/24/03		Synthetic minor
GENERAL PERMIT NATURAL GAS FIARED BURNOFF OVEN		7/23/03		Rule requirement
HOLCIM	60-710	7/22/03	YES	Controversial
CADILLAC RUBBER & PLASTICS	286-02	6/27/03		Synthetic minor
YCUA	68-02	6/24/03	YES	Controversial
UNIVERSAL COATING	177-96 B	6/11/03	YES	Controversial
EATON PROVING	34-98A	6/2/03		Synthetic minor

KC INDUSTRIES	328-96 A	5/27/03		Synthetic minor
PHARMACIA & UPJOHN	227-02	5/5/03		Stationary source *
GENERAL MOTORS - PONTIAC	1275-9 0C	4/21/03		Synthetic minor
MARATHON ASHLAND PETROLEUM	28-02	4/18/03		Netting
MIDLAND COGENERATION VENTURE	209-02	4/17/03		PSD
MARATHON ASHLAND PETROLEUM	67-02	3/25/03		Netting
ALCHEM ALUMINUM	20-02	4/3/03		PSD
UNIVERSITY OF MICHIGAN	275-89 B	3/31/03		PSD
GM SAGINAW METAL CASTING	42-02	3/17/03		Netting
CYTEC	418-96 A	3/5/03		Synthetic minor
VALLEY ASPHALT	156-95 J	2/21/03		Controversial
DAIMLERCHRYSLER TRENTON PLANT	179-99 A	1/21/03		Synthetic minor
GM DETROIT HAMTRAMCK	125-81 C	2/14/03		PCP
GM LANSING CRAFT CENTRE	198-01 A	2/10/03		Controversial
GREDE FOUNDRIES INC VASAR FOUNDRY	17-02	1/20/03		PSD
BLUEWATER ENERG CENTER LLC	39-01	11/26/02		PSD
KALKASKA GENERATING	119-02	12/19/02		PSD

\* Multiple stationary sources redefined to establish one and confirm reissued permit complies with all previous PSD and LAER determinations and requirements.

More general information is enclosed in Appendix C ("Overview of the NSR Process" and "MDEQ Standards").

Do your construction permits:

- YES 1. Identify each emissions unit regulated?
- YES 2. Establish emissions standards or other operational limits that must be met, including appropriate averaging times for numeric limits?
- YES 3. Include specific methods for determining compliance and excess emissions, including reporting, record keeping, monitoring, and testing requirements?

- YES 4. Outline procedures necessary to maintain continuous compliance with emission limits?
- YES 5. Establish specific, clear, concise, and enforceable permit conditions?
- YES 6. Include conditions necessary for a source to avoid otherwise applicable requirements (e.g., keeping a modification "minor")?
- YES 7. Do you use statements of basis for construction permits?

**IX). Reform Questions**

**1. Program Implementation**

- YES 1. PSD Delegated States: Are you fully implementing the new PSD provisions that went into effect on March 3, 2003? If not, what provisions are not being implemented? Why?
2. PSD SIP-approved States and nonattainment NSR: Are you currently developing rulemaking to adopt the 3/3/03 provisions? What is your timeline for adoption? Does this include changes to minor NSR regulations?

Answer: MDEQ is currently developing rulemaking to adopt the 3/3/03 provisions, but they are also considering all options, with the evolving lawsuits. The timeline for adoption is presently targeting Early 2005. This does not include changes to minor NSR regulations.

**2. Previous Experience with Provisions**

- YES 1. Have you granted any PCP exclusions prior to the new regulations (pursuant to the 7/1/94 EPA policy memo or the WEPCO rules)?

Note: MDEQ granted 3-4 PCP exclusions/ year.

2. Have you made PSD/NSR applicability determinations based on a past actual vs. projected future actual test (WEPCO)? If Yes, how do you track future actual emissions?

Answer: MDEQ made PSD/NSR applicability determinations based on a past actual versus projected future actual test. The actual emissions are tracked in permit conditions, and recorded from inspections at the sources.

- NO 3. Have you issued any PAL permits?

**3. New Provisions**

- YES 1. Have you received permit applications requesting any of the new NSR provisions? If yes, please explain.

Answer: MDEQ received 5 permit applications requesting new NSR provisions (below). The application forms are not changed.

- *Holcim*, 60-710, used past actual to future actual test, issued
- *Detroit Edison*, 158-03 & 159-03, clean unit designations, issued

- *Marathon Ashland Petroleum*, 262-02, netting, soon to go out for notice
- *Dow Chemical*, 251-03, netting, application being processed

YES 2. Have you provided training to your staff on the new NSR provisions?

Answer: MDEQ is committed to training not only own staff, but also other states (MPCA, Minnesota Pollution Control Agency), the public (regulated communities), industries (such as Michigan Manufacturing Association), and other interested parties.

#### **VIII. File Review**

The file review part consisted of 30 minutes review of each of the following type of permits: a PSD permit with a BACT analysis, a synthetic minor permit, a net-out permit, and a controversial permit. The choice of the permits was at MDEQ's discretion, and the permits chosen were:

- A. Dearborn Industrial Generation, issued 2000
- B. Continental Aluminum (controversial permit), issued 2001
- C. Delphi Saginaw Steering Systems (opt-out permit), issued 2002
- D. El Paso Merchant Energy (PSD permit), issued 2002
- E. Daimler Chrysler Corporation (Opt-out, synthetic minor permit), issued 2003

#### **Files Summary**

##### **A. Dearborn Industrial Generation, final permit issued in 2000**

The permit for Dearborn Industrial Generation is an example of a PSD permit for a pollutant and a netting out example for another pollutant.

The file contains a chronologically organized set of documents, starting with the permit application information, including the technical documentation, air quality data and evaluation form, the draft permit (July 1999), the final permit (October 1999), and the responses to the comments made during the public comment period and public hearing. It also includes the correspondences between MDEQ and the public (citizens, citizen groups and environmental groups), phone calls logs, and summaries of internal meetings.

##### **B. Continental Aluminum Company, final permit issued in 2001**

The permit for Continental Aluminum Company (PTI 504-96B) is an example of a controversial permit. In the permit application the company requested process modification to their existing secondary aluminum processing facility. These modifications, and a consent order, that required the payment of a civil penalty, were to resolve prior air quality violations at the facility.

The file contains the permit application, draft and final permits (including the changes made due to the comments), public participation documents, charts identifying significant dates, the consent order, compliance issues, the compliance program, with the scrap inspection and malfunction plans. It also contains the email communications, summaries of internal meetings, and documentation provided at the hearing.

**C.** Delphi Saginaw Steering Systems, final permit issued in 2002

The PTI No. 143-02 for Delphi Saginaw Steering Systems is an example of an "opt-out" permit. The applicant proposed to relocate an existing natural gas-fired boiler from one plant to another. The facility took restrictions on fuel usage, and therefore was not subject to the federal PSD requirements.

The permit's file contains a good chain system, including the initial priority dates, staff responsible, and all the appointment dates. It also contains the public notification, public participation documents, newspaper announcements, the fact sheet, general conditions (including a general review of the permit conditions, and approval cover letter), and draft and final permits, with detailed emission calculations. Additionally, the file includes all the correspondences, phone calls logs, and contact information.

**D.** El Paso Merchant Energy, final permit issued in 2002

MDEQ chose the PTI 185-01 for El Paso Merchant Energy as the example for a PSD permit. The permit is for installation of a 510 MW electric generating plant consisting of three natural gas-fired combustion turbines.

The file contains a complete public participation documentation (public notification, public hearing information, response to comments according 40 C.F.R. 124.17, along with MDEQ contact information). The control technology review included the correspondences between the company and MDEQ, and complete research material for the BACT analysis. Generally, the file includes all the correspondences, phone calls logs, and contacts information.

**E.** Daimler Chrysler, final permit issued in 2003

Daimler Chrysler proposed through PTI 261-99A to limit the fuel use to restrict NOx and CO emissions from the entire facility below major source thresholds. The file contains complete public notification information, along with the technical documentation, and the fact that no comments were received. Because initially the permit was received by Wayne County MDEQ, Air Quality Management Division (dissolved in 2001), and then reassigned to MDEQ Detroit Office, the file contained in the General Comments the Timeline and Phonelog, with all the MDEQ engineers involved in the permitting process.